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OPERATIONAL USE OF THE UH-1H HELICOPTERS IN ARCTIC ENVIRONMENT

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Technology, Incorporated

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EUSTIS DIRECTORATE POSITION STATEMENT

In addition to the conventional four mission segments of data processing, the contractor has developed and incorporated a seven-mission-segment analysis which provides the design engineer with better insight into the parametric values and related maneuvers affecting structural integrity.

This report is published to define the operational use of the UH-1H in the arctic environment of Alaska as an engineering aid in the design and development of improved aircraft.

Mr. William T. Alexander, Jr., of the Technology Applications Division served as project engineer for this effort.

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From operational usage parameter measurements on two UH-1H helicopters, 88 hours of valid multichannel flight data were recorded between December 1972 and April 1973 while the helicopters operated from Fort Greely, Alaska. Data were processed and analyzed by two different techniques: (1) the Four Mission Segment technique which processed the data according to four flight phases, or mission segments, namely,

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ascent, maneuver, descent, and steady state; and (2) the Flight Condition Recognition (FCR) technique, which processed the data according to the occurrence of 20 different flight conditions within seven mission segments, namely, ground operation, hover, ascent, level flight, descent, transition, and autorotation. Data are presented in the form of time and occurrence tables, cumulative frequency distribution curves, and exceedance curves. In the comparison of the Alaskan UH-1H data with previous Southeast Asia (SEA) UH-1H data, both processed by the Four Mission Segment technique, the Alaskan data had greater amounts of time at the higher values of airspeed, gross weight, and engine torque but lesser amounts of time at equivalent rates of climb and descent. In the general comparison of the Alaskan data processed by the two techniques, the FCR data provided better resolution of the operational usage data, better identification of significant fatigue-damage maneuvers, and better definition of the maneuver-induced normal load factors. In addition, the FCR technique proved to be practical as well as capable of yielding more meaningful fatigue-damage information.

PREFACE

Technology Incorporated, Dayton, Ohio, prepared this report to satisfy its contractual efforts on an operational usage data program to collect, process, and analyze an 88-hour sample of flight data obtained on two UH-1H helicopters operating in the Arctic environment. The program was sponsored by the Eustis Directorate, U.S. Army Air Mobility Research and Development Laboratory, Fort Eustis, Virginia, under Contract DAAJ02-73-C-0014, DA Task 1F262208AH9001. The project monitor for the Army was Mr. William Alexander.

Technology Incorporated wishes to acknowledge the support and cooperation given by TECOM and the Arctic Test Center at Fort Greely, Alaska. In particular, our thanks go to Colonel D. Shumacher, Lieutenant Colonel B. Young, and Major L. Morgan.

Technology Incorporated personnel responsible for this program were Mr. Joseph F. Braun, Manager of the Systems and Electronics Department; Mr. Henry C. Pender, Project Manager, who directed the installation and operation of the data recording systems; Mr. John F. Nash and Mrs. Ruth E. Meyers, who directed the data processing; and Messrs. Raymond B. Johnson, Jr., and Roy E. Johnson, Jr., who developed the FCR technique and directed the data analysis and presentation.

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INTRODUCTION

For the continued study of Army helicopter operations, a multichannel operational usage data program was conducted on two UH-1H helicopters flying assorted missions in the arctic environment from December 1972 to April 1973. During this period, 88 hours of valid in-flight data were recorded and processed for each of 15 time-related parameters. These parameters were selected to reflect the operational usage of the helicopters. Two techniques, the Four Mission Segment and the Flight Condition Recognition (FCR) methods, were used in processing and analyzing the data.

The program objectives were to acquire operational usage data of the UH-1H operation in the arctic environment; to develop an improved method for acquiring and processing operational usage data; and to analyze these data in an effort to improve the fatigue analyst's understanding of the operational flight spectrum of U.S. Army helicopters and its effect in defining reliable design criteria for helicopters.

The UH-1H is an all-metal, single-engine helicopter. A single, two-bladed, semirigid teetering main rotor provides lift, and a two-bladed, semirigid, delta-hinged tail rotor provides antitorque and directional control. Figure 1 presents a photograph and a summary of the characteristics and limitations of the UH-1H helicopter. An oscillograph-type recording system was used to measure the following 15 in-flight parameters: airspeed; altitude; vertical, lateral, and longitudinal acceleration at the helicopter's center of gravity; outside air temperature; main rotor speed; engine torque; longitudinal cyclic boost tube, lateral cyclic boost tube, and collective cyclic boost tube loads; and longitudinal control, lateral control, collective control, and rudder pedal positions--all related to time. Field personnel logged additional information to permit the computer processing of the in-flight recordings. Such supplementary data consisted of time, fuel, and load at takeoff and landing; base pressure and temperature at takeoff; and mission type. The data processing derived additional parameters: specifically, the instantaneous weight, the rotor tip speed ratio, and the ratio of the thrust coefficient to the rotor solidity.

As previously used and documented in USAAMRDL TR-73-15[1], the

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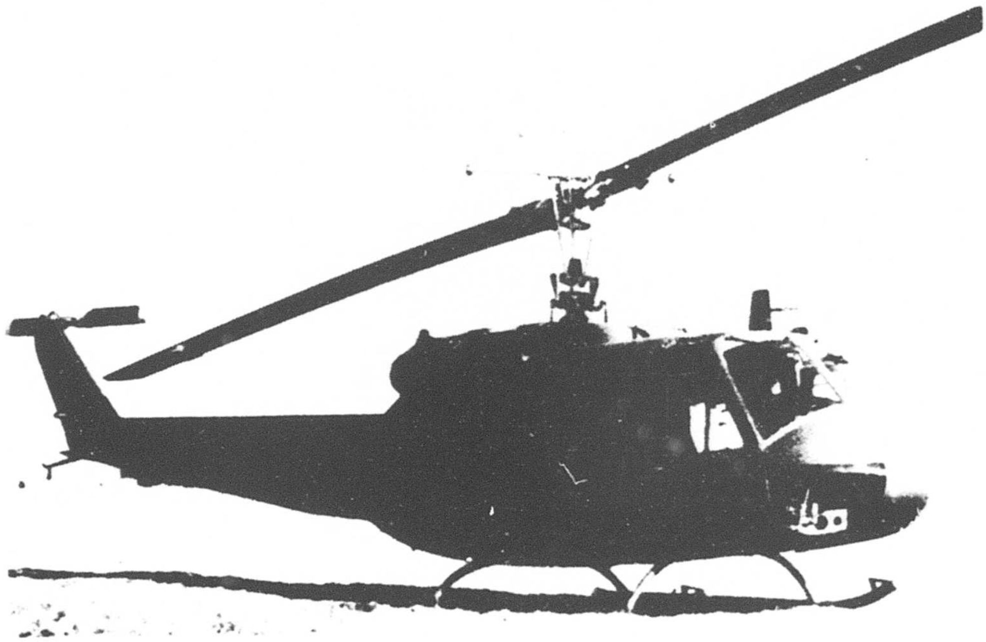
[1] Johnson, Raymond B., Clay, Larry E., and Meyers, Ruth E., OPERATIONAL USE OF UH-1H HELICOPTERS IN SOUTHEAST ASIA, Technology Incorporated, Dayton, Ohio; USAAMRDL Technical Report 73-15, U.S. Army Air Mobility Research and Development Laboratory, Fort Eustis, Virginia, May 1973, AD 764 260.

Four Mission Segment technique divides the operational usage data into four categories or mission segments: ascent, maneuver, descent, and steady state. The first three segments are transient, or unsteady, regimes of flight and are distinguished from the steady-state segment by the variations in the control boost tube load, airspeed, and altitude parameters. As developed during this program, the FCR technique segregates the data into 24 distinct flight conditions, such as left or right turn, collective pull-up or pushover, and takeoff or landing, occurring in any one of seven mission segments. The seven mission segments are ground operation, hover, ascent, level flight, descent, transition, and autorotation.



Characteristics		Limitations	
rotor diameter	48 ft	normal rated power	1250 hp
rotor solidity	0.0464	military rated power	1400 hp
engine Lycoming	T-53-L-13	usable power (transmission limit)	1100 hp
design max gross wt	9500 lb	100% rotor speed	324 rpm
empty weight (avg)	4920 lb	max airspeed	120 kn

Figure 1. UH-1H Helicopter.

This report describes the recording system and its installation in each of the two UH-1H helicopters, details the data collection, defines the recorded and derived parameters, outlines the data processing and quality control, explains the data computations, and finally presents and analyzes the processed data.

INSTRUMENTATION

To obtain the required operational usage data, oscillographic recording systems were installed in two UH-1H helicopters assigned to the Arctic Test Center at Fort Greeley, Alaska. Identified by serial numbers 66-16969 and 67-17686, these aircraft participated in the entire data acquisition effort from December 1972 to April 1973.

DESCRIPTION OF RECORDING SYSTEM COMPONENTS

Four Century Model 409B oscillograph recorders, each with 14 data channels and capable of recording 12 dynamic parameters on 3-5/8-inch-wide photosensitive paper, were used in this program because of their inherent design to withstand severe shock and vibration and extreme environmental conditions. In this program two recorders were installed on each aircraft to record 15 channels of in-flight variables, several of which were recorded on both recorders to expedite the data reduction. On each recorder, one channel was used to monitor the supply voltages, a second to delineate a time pattern reflecting a 1-minute cycling, which was used to correlate the data, and a third to trace a static line for measurement reference.

Two Technology Incorporated Model 49776 signal conditioning units were used on each aircraft to regulate the voltage signals from the various transducers. These units were modified to amplify the boost tube strain, airspeed, and altitude trace deflections.

To derive airspeed, a Statham Model PM96TC-.5-350 (0 to 0.5 psid) pressure transducer was used to measure the dynamic pressure. To derive altitude, a Statham Model P96-15A-350 (0 to 15 psia) pressure transducer was used to measure the ambient static pressure.

For the three linear acceleration measurements, a Statham Model A3-5-350 (±5g) accelerometer was used to sense vertical acceleration, and two Statham Model A3-1.5-350 (±1.5g) accelerometers were used to sense lateral acceleration and longitudinal acceleration.

A frequency-to-voltage converter and associated circuitry were incorporated in the recording system to measure the rotor speed by sensing the frequency of the rotor tachometer generator.

A Minco Model S-6B resistance thermal ribbon was used to measure the outside air temperature.

To measure the engine torque pressure, a Viatron Model PTB103 (0 to 100 psig) pressure transducer was connected in parallel with each helicopter's torque pressure transmitter.

Micro-Measurements Corporation Model EA-13-250BF-350 strain gages were installed on the longitudinal cyclic, lateral cyclic, and collective boost tubes to measure the strains in these components resulting from control and rotor motions. Two sets of gages were mounted side-by-side on each boost tube, and each set was wired into a Wheatstone bridge with two active arms and two inactive arms for temperature compensation. One set of gages was designated as "primary" and the other as a "spare." After their installation on the boost tubes, both the primary and the spare bridges were calibrated to provide a relationship between the bridge output in volts and the boost tube axial load in pounds.

Collective control stick and rudder pedal positions were measured by utilizing Transducer Controls Corporation Model TCC-PT101-15B position transducers; and the longitudinal and lateral control stick positions were measured with Markite Model 2094 infinite-resolution potentiometers.

The block diagram in Figure 2 illustrates the functional integration of the components making up the recording system.

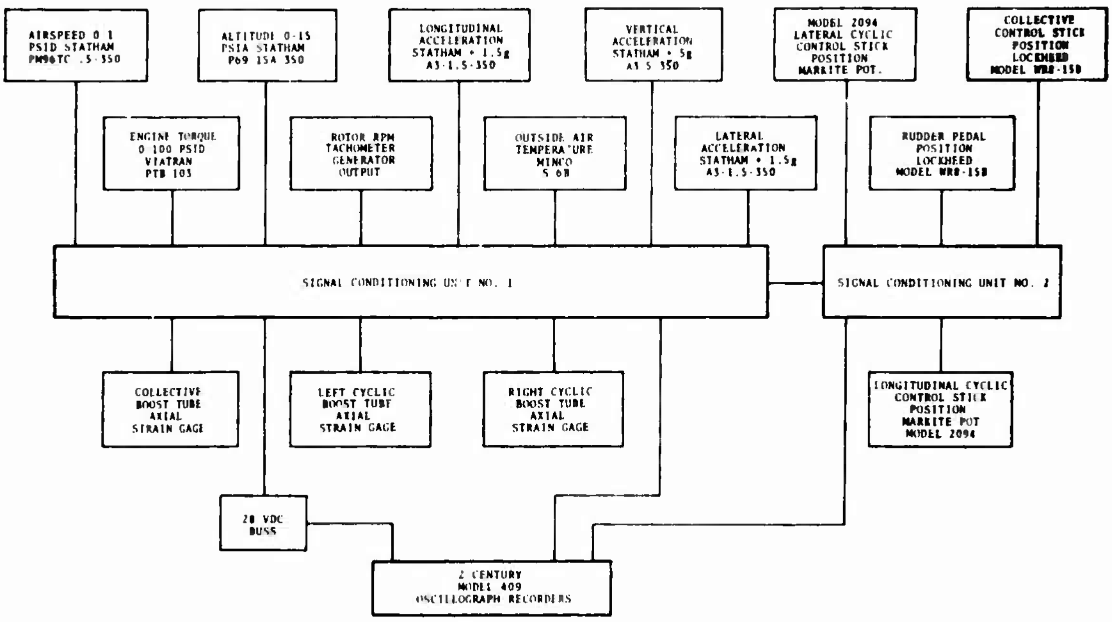


Figure 2. Functional Block Diagram of Oscillograph Recording System Installed in UH-1H Helicopters.

INSTALLATION OF RECORDING SYSTEM

The two Century 409 recorders, the two signal conditioning units, and the external 30-second timer were located just forward of the transmission housing. These units were mounted to a flat plate which was secured to the floor of the aircraft by using the existing floorboard mounting holes.

Figure 3 is an outline drawing of the UH-1H helicopter showing the recording system component locations.

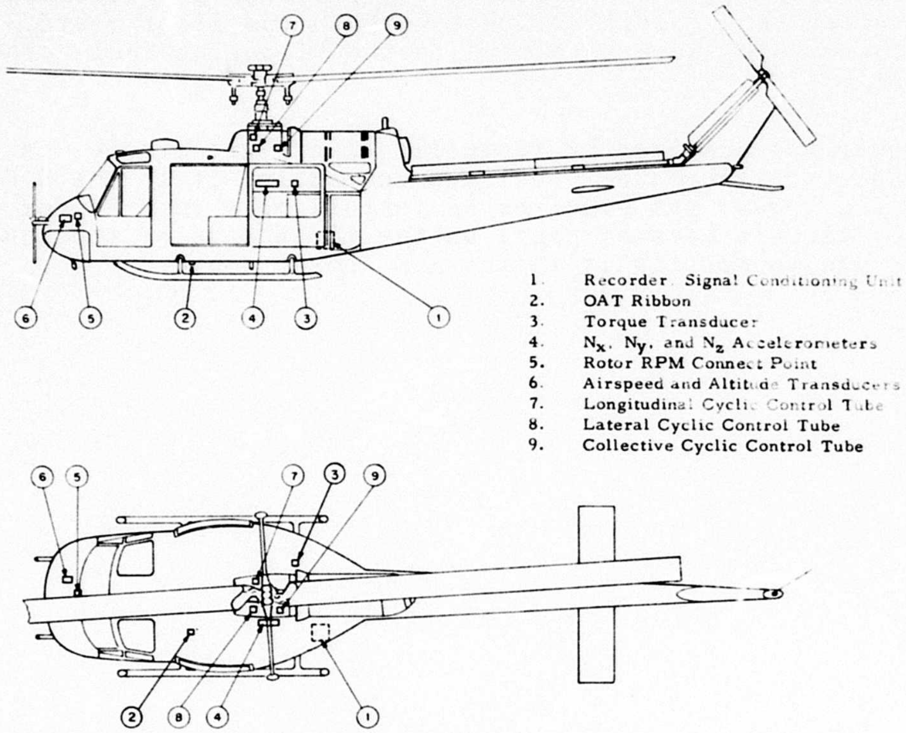


Figure 3. Multiview Drawing of UH-1H Helicopter With Locations of Major Recording System Components.

The three accelerometers were mounted close to the aircraft cg on a special bracket which was attached to the aircraft structure to the left side and just forward of the rotor shaft. The engine torque transducer was mounted to the right forward firewall. Two spare hose clamps were removed from this area to provide the clamp mounting holes for this installation. High-pressure hose assemblies were installed in parallel to the aircraft torque transmitter. The airspeed and altitude transducers were mounted in the nose compartment by using existing holes in the aircraft. Low-pressure hose assemblies were installed to sense the aircraft's pitot and static pressure systems.

The input load for rotor rpm was connected to pin No. 2 of terminal board No. 1 to sense the output of the rotor tack generator. The OAT ribbon was attached to the bottom of the aircraft just to the left of the aft searchlight. The wires from the OAT ribbon were routed into the aircraft through existing

drain holes. The existing three boost tubes were removed from the aircraft and replaced by the three instrumented boost tubes. The collective stick and rudder pedal position potentiometers were mounted to a special bracket beneath the floor board. The actuator arms were connected to the "floating" bell crank assembly.

D.C. power was acquired by installing a circuit breaker in the overhead circuit breaker panel and connecting it to the D.C. buss. A.C. power was acquired by installing a fuse holder in the A.C. circuit breaker panel on the right side of the center console and connecting it to the A.C. power source.

DATA COLLECTION

During the data collection period from December 1972 to April 1973, 88 hours of in-flight data were recorded. All 88 hours of data were processed by the Four Mission Segment technique and 36 hours of these data were processed by the FCR technique. Since the data acquisition under Arctic conditions was severely limited because of unusually warm weather during the recording period, some oscillograms of recordings made during the low-temperature flights were used to increase the size of the data sample even though there were data traces in these recordings that were considered invalid. Table I lists the validly recorded data hours for the 11 in-flight parameters processed for the final data presentation. The processed data represent 10[illegible] engine starts and 156 touchdowns.

TABLE I. HOURS OF VALID DATA RECORDED FOR ELEVEN IN-FLIGHT PARAMETERS

Parameter	Flight Hours of Valid Data
Airspeed	88.5
Altitude	88.5
Outside Air Temperature	88.5
Vertical Acceleration	88.5
Lateral Acceleration	79.4
Longitudinal Acceleration	67.1
Rotor Speed	59.5
Engine Torque	87.4
Longitudinal Cyclic Boost Tube Load	65.9
Lateral Cyclic Boost Tube Load	65.9
Collective Boost Tube Load	65.9

After each recorded flight, the field technician filled out a special form to log the supplemental data needed to process the oscillograms. This additional data included the following:

flight date; mission type; base elevation; barometric pressure and temperature at takeoff; base location, time, and fuel, passenger, and cargo weights at takeoff and landing; and airspeed and rotor speed at various check points. The field technician also logged the serial number of each transducer so that the calibration data could be correlated with the recorded data during the data processing. In addition, upon developing the oscillograms and observing any trace anomalies, the technician took remedial action as soon as possible.

DATA DEFINITIONS

RECORDED PARAMETERS

Of the 15 recorded in-flight parameters, the following 11 were to be processed for final data presentation: (1) airspeed, (2) altitude, (3) outside air temperature, (4) c.g. vertical acceleration, (5) c.g. lateral acceleration, (6) c.g. longitudinal acceleration, (7) rotor speed, (8) engine torque, (9) longitudinal cyclic boost tube load, (10) lateral cyclic boost tube load, and (11) collective boost tube load. For each of these parameters and the computed parameters presented below, Table II lists the ranges selected for the data blocks.

COMPUTED PARAMETERS

From the fuel, cargo, and passenger weights at takeoff and landing, as logged on the supplemental data sheets, the gross weight was computed for the start and end of each mission. A constant rate of fuel consumption was assumed to obtain the average weight-loss rate that was used to compute the instantaneous gross weight. Weight gains or losses because of cargo or passenger changes were introduced at times noted on the supplemental data sheets.

Since the pitot-static position error was judged to be negligible in the range of interest, only indicated airspeeds were considered. Rotor speed and outside air temperature were computed by applying the calibrations to the trace measurements. On the basis of the average slope of pressure altitude derived from the static pressure trace, the rate of climb was computed continuously during each mission segment. Engine torque was calibrated in units of psi as taken from the cockpit indicator.

To obtain the boost tube loads, the measured trace displacements of these loads from their hovering mean were converted to pounds of force.

Each peak of c.g. vertical acceleration, a_z, was measured directly from the oscillogram trace. To obtain the normal load factor, n_z, and the incremental normal load factor, Δn_z, for each vertical acceleration, the following relationships were used:

$$\Delta n_z = \frac{a_z}{g}$$

$$n_z = \Delta n_z + 1.0$$

TABLE II. DATA PROCESSING RANGES FOR RECORDED AND COMPUTER PARAMETERS

Recorded Parameters

n_x and n_y (g)	Airspeed (kn)	Longitudinal, Lateral, and Collective Stick Boost Tube Load (lb)	n_z (g)	OAT (°F)
<-0.40	<40	<-450	<0.2	<-100
-0.40 to -0.35	40 to 60	-450 to -400	0.2 to 0.4	-100 to -80
-0.35 to -0.30	60 to 70	-400 to -350	0.4 to 0.5	- 80 to -60
-0.30 to -0.25	70 to 75	-350 to -300	0.5 to 0.6	- 60 to -40
-0.25 to -0.20	75 to 80	-300 to -250	0.6 to 0.7	- 40 to -20
-0.20 to -0.15	80 to 85	-250 to -200	0.7 to 0.8	- 20 to 0
-0.15 to -0.10	85 to 90	-200 to -150	0.8 to 1.2	0 to 20
-0.10 to 0.10	90 to 95	-150 to -100	1.2 to 1.3	20 to 40
0.10 to 0.15	95 to 100	-100 to 100	1.3 to 1.4	≥40
0.15 to 0.20	100 to 105	100 to 150	1.4 to 1.5	
0.20 to 0.25	105 to 110	150 to 200	1.5 to 1.6	
0.25 to 0.30	110 to 115	200 to 250	1.6 to 1.7	
0.30 to 0.35	115 to 120	250 to 300	1.7 to 1.8	
0.35 to 0.40	120 to 125	300 to 350	1.8 to 2.0	
≥0.40	≥125	350 to 400	2.0 to 2.2	
		400 to 450	2.2 to 2.4	
		≥450	≥2.4	

Rotor Speed (rpm)
<274
274 to 284
284 to 294
294 to 304
304 to 314
314 to 324
324 to 334
≥334

Computed Parameters

n_{z_e} (g)	Climb Rate (ft/min)	Rotor Tip Speed Ratio (μ)	Gross Weight (lb)	Engine Torque (psi)
<0.2	<-2100	<0.05	<6000	<10
0.2 to 0.4	-2100 to -1800	0.05 to 0.10	6000 to 7000	10 to 20
0.4 to 0.5	-1800 to -1500	0.10 to 0.15	7000 to 8000	20 to 30
0.5 to 0.6	-1500 to -1200	0.15 to 0.20	8000 to 9000	30 to 40
0.6 to 0.7	-1200 to -900	0.20 to 0.25	≥9000	40 to 50
0.7 to 0.8	-900 to -600	0.25 to 0.30		50 to 60
0.8 to 1.2	-600 to -300	≥0.30		60 to 70
1.2 to 1.3	-300 to 300			≥70
1.3 to 1.4	300 to 600			
1.4 to 1.5	600 to 900			
1.5 to 1.6	900 to 1200			
1.6 to 1.8	1200 to 1500			
1.8 to 2.0	1500 to 1800			
2.0 to 2.2	1800 to 2100			
2.2 to 2.4	≥2100			
2.4 to 2.6				
≥2.6				

Thrust Coef./Rotor Solidity (C_T/σ)	Density Altitude (ft)
<0.02	<-6000
0.02 to 0.04	-6000 to -3000
0.04 to 0.06	-3000 to 0
0.06 to 0.08	0 to 3000
≥0.08	3000 to 6000
	≥6000

For each of the normal load factors, the equivalent normal load factor, n_{z_e}, was computed according to the following relationship:

$$n_{z_e} = n_z \frac{W_i}{W_D}$$

where n_z = normal load factor for vertical acceleration peak
W_i = instantaneous weight at time of acceleration peak
W_D = design gross weight, 6600 lb

For each data reading point, three derived parameters were added: the rotor tip speed ratio, the ratio of thrust coefficient to the rotor solidity, and the density altitude.

The rotor tip speed ratio, μ, was computed by the following equation:

$$\mu = \frac{V}{\Omega R}$$

where V = airspeed, ft/sec
Ω = rotor angular velocity, rad/sec
R = rotor radius, 24.0 ft

The following equation was used to compute the ratio of thrust coefficient to the rotor solidity, that is, C_T/σ:

$$C_T/\sigma = \frac{W}{\rho\pi^2(\Omega R)^2\sigma}$$

where C_T = thrust coefficient
W = gross weight (instantaneous), lb
ρ = air density at altitude, slugs/ft^3
σ = rotor solidity = 0.0464

The following equation[2] was used to compute the density altitude, h_d, since this parameter is normally used in describing helicopter performance:

$$h_d = 145,300 \left[1 - \left(\frac{518.4\ P_a}{29.92(OAT + 460)}\right)\right]^{0.235}$$

where P_a = static pressure, inches of mercury
OAT = outside air temperature, °F

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2 von Mises, Richard, THEORY OF FLIGHT, McGraw Hill Book Company, Inc., New York, 1945, p. 11.

DATA PROCESSING

INTRODUCTION

The acquired data were processed by two different methods: the Four Mission Segment and the Flight Condition Recognition (FCR) techniques. The first technique was originally developed to gain better insight into the operation of U.S. Army helicopters and thereby to improve the design criteria for future helicopters. Recent attempts of prime helicopter manufacturers to relate the Four Mission Segment data directly to a fatigue spectrum, and hence to component fatigue analyses, have not been entirely successful as documented in USAAMRDL TR-73-40[3], TR-73-39[4], and TR-73-41[5]. Consequently, as an improved technique, the FCR technique was implemented during the current program. This technique is an outgrowth of an Air Force-conducted study,[6] which investigated and formulated new techniques in acquiring and processing operational usage data for the purpose of defining fatigue spectra.

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[3] Herskovitz, A., and Steinmann, H., CH-47A DESIGN AND OPERATIONAL FLIGHT LOADS SURVEY, Boeing-Vertol Division, Boeing Company, Philadelphia, Pennsylvania; USAAMRDL Technical Report 73-40, U.S. Army Air Mobility Research and Development Laboratory, Fort Eustis, Virginia, November 1973, AD 772 949.

[4] Mongillo, A.L., and Johnson, S.M., CH-54A DESIGN AND OPERATIONAL FLIGHT LOADS STUDY, Sikorsky Aircraft Division, United Aircraft Corporation, Stratford, Connecticut; USAAMRDL Technical Report 73-39, U.S. Army Air Mobility Research and Development Laboratory, Fort Eustis, Virginia, November 1973, AD 773 551.

[5] Glass, Marc E., Kidd, David L., and Norvell, John P., AH-1G DESIGN AND OPERATIONAL FLIGHT LOADS STUDY, Bell Helicopter Company, Fort Worth, Texas; USAAMRDL Technical Report 73-41, U.S. Army Air Mobility Research and Development Laboratory, Fort Eustis, Virginia, January 1974.

[6] Johnson, Roy E., and Silcott, Charles J., METHODS TO DETERMINE THE SERVICE USAGE SPECTRUM OF THE UH-1F HELICOPTER, Technology Incorporated, Dayton, Ohio; Technology Incorporated Report 43220-72-1, Aircraft Systems Engineering Branch, Warner Robins Air Materiel Area, Robins Air Force Base, Georgia, March 1972.

The FCR technique implemented during this program was developed so that fatigue analysts could easily understand and interpret the processed data. The various general methods of identifying typical helicopter flight conditions were reviewed, refined, and integrated into a single method. The major factors which influenced this development were costs, availability of transducers, and ease in establishing recognition patterns of the various flight conditions. Consequently, the FCR technique presented in this report is only one of a number of technically practical techniques.

In addition to the parameters previously recorded on the UH-1H (Reference 1), four parameters--longitudinal and lateral control positions, collective position, and rudder pedal position--were required to process the data by the FCR technique.

Seven mission segments and twenty-four distinct flight conditions were defined, and editing criteria based on various combinations of these were formulated. In a brief flight test program to verify or improve instrumentation sensitivities and editing criteria, various maneuvers, such as left and right turns, were performed in level flight and during hover.

The following paragraphs discuss the principles and procedures to edit, read, check, and accept the oscillogram data processed by both the Four Mission Segment and the FCR technique.

FOUR MISSION SEGMENT DATA PROCESSING

As in previous programs to process helicopter operational usage data (Reference 1), the oscillogram data for each flight were separated into four mission segments: (1) ascent, (2) maneuver, (3) descent, and (4) steady state. The first three segments are the transient, or unsteady, regimes of flight and were distinguished from the steady-state segment by the variations in the stick boost tube load, airspeed, and altitude traces. The segments were identified and defined as follows: ascent included both the takeoff and climb to the initial cruise altitude and all other unsteady ascents to other altitudes; maneuver included flight sections where ascents and descents were too short to be classified as such and were characterized by activity in the airspeed, altitude, and stick boost tube traces; descent included the unsteady part of flare and landing and all other unsteady descents; and steady state included cruise, hover, steady ascent (after the initial climb), and steady descent. Flare and landing initiated from hover was included in steady state. Such steady-state sections were identified by minimal fluctuation of the stick boost tube traces about mean values and the constancy or smooth change of the airspeed and altitude traces.

Preparatory to the data reading, data processing editors examined each oscillogram for evidence of any instrumentation anomaly such as improper sensitivity. The editors timed all flights and demarcated the four mission segments in each flight according to the foregoing criteria.

After demarcating the flights into mission segments, the editors marked the traces to govern the data reading. The vertical acceleration trace was marked wherever a peak met the following two conditions: (1) the peak fell outside prescribed threshold levels (±0.2g about the 1.0g mean), and (2) the peak had a rise and a fall (or fall and rise) that were each 50 percent of the primary peak value or 0.2g, whichever was greater. Although the prescribed thresholds were 0.8g and 1.2g, the editors used levels of 0.84g and 1.16g to ensure the inclusion of all valid peaks. However, any of the peaks read within the fixed threshold levels of 0.8g and 1.2g were eliminated during the processing. In addition, the editors identified each peak as being maneuver- or gust-induced. To determine whether a peak was induced by a maneuver or a gust, the editors noted the behavior of the vertical acceleration (n_z) and airspeed traces. An n_z peak was coded as being gust-induced if the airspeed trace had a jagged pattern and the n_z peak had a short duration and an exponential decay. All other peaks were coded as maneuvers.

The editors marked primary peaks on the lateral and longitudinal acceleration traces wherever they deflected outside the prescribed threshold of ±0.1g. These peaks were not identified as being maneuver- or gust-induced. As before, to ensure the inclusion of all valid peaks, the editors used levels of ±0.097g instead of 0.1g. Again, however, any peaks read within the prescribed threshold of ±0.1g were eliminated during the computer processing.

In editing the three control stick boost tube load traces, the editors marked (1) those peaks that fell outside the threshold of ±100 pounds and (2) those peaks that had a rise and a fall that were each 50 percent of the primary peak value or 100 pounds, whichever was greater. The normal value used was dependent on the mission segment; for the steady-state mission segment, the normal used was the steady value of the boost tube traces just before and after the peak load was encountered. For the three transient mission segments, a set of mean values was chosen to approximate the boost tube loads during hover. These mean values were used as the zero values for all boost tube load calculations.

At each vertical acceleration peak, the traces were measured for values of c.g. normal load factor, n_z; c.g. longitudinal

load factor, n_x; and c.g. lateral load factor, n_y. At each primary longitudinal acceleration peak, the traces were measured for values of n_y, n_x, n_z, and longitudinal cyclic boost tube load. At each primary lateral acceleration peak, the traces were measured for values of n_x, n_y, n_z and the lateral cyclic boost tube load. Also, the boost tube load traces, along with the airspeed, altitude, rotor speed, and engine torque traces, were marked for sufficient points to permit an adequate representation of the flight profile.

The peak values of the three linear accelerations were measured from the normal (static) positions of the respective traces. These positions were defined when the traces indicated that the helicopter was in a cruise condition. The positive sense of n_x is acceleration forward, and the positive sense of n_y is acceleration to the right.

Following the editing of each oscillogram, the data were measured on semiautomatic oscillogram readers, and the measurements were converted into engineering units. These operations are discussed in later paragraphs.

FLIGHT CONDITION RECOGNITION DATA PROCESSING

In the Flight Condition Recognition (FCR) data processing, the oscillogram data for each flight were separated into seven mission segments: (1) ground operation, (2) hover, (3) ascent, (4) level flight, (5) descent, (6) transition, and (7) autorotation. Ground operation was identified by unvarying airspeed and altitude at ground values; engine torque and rotor speed above specified minimums but below values required for hover; and vertical acceleration (n_z) characteristics in ground operation. Hover was identified by airspeed at approximately zero; steady altitude; engine torque pressure of approximately 35 psi; and the longitudinal and the lateral cyclic control movement and the vertical acceleration choppy about a steady mean. Ascent was identified by altitude increasing at a rate greater than approximately 300 feet per minute and a higher than average torque pressure. Level flight was identified by relatively constant control positions, rotor speed, engine torque pressure, and altitude. Descent was identified by altitude decreasing at a rate greater than approximately 300 feet per minute. Transition was identified by large torque pressure gradients before and after the autorotation segment. Autorotation was identified by decreasing altitude, a high rate of descent, and a low engine torque pressure.

In editing the oscillograms, the data processing editors examined each oscillogram for evidence of any instrumentation

anomaly. The editors timed all flights and demarcated the seven mission segments in each flight according to the foregoing criteria.

After demarcating the flights into mission segments, the editors identified the various flight conditions in each of the mission segments. For this program, 25 flight conditions were tentatively established. As noted in Table III, 24 flight conditions were finally defined and used; one of the initially proposed conditions, No. 10 in the table listing, was later omitted. All 25 numbers, however, were retained in the data processing. Also identified in Table III are the mission segments in which the flight condition could occur, the time limit on the flight condition, and the basic characteristics of each flight condition. Two examples of the editing technique of identifying mission segments and flight conditions are shown in Figures 4 and 5. The first example, Figure 4, illustrates a collective pull-up during the level flight mission segment. Gusty conditions had caused a slight descent and the collective pull-up was used to initiate a slight ascent as a correction. The pull-up was identified by the increase in collective control, the increase in torque pressure, and the occurrence of a positive vertical acceleration peak. In this example, the recovery from the collective pull-up was a collective pushover. The second example, Figure 5, illustrates a flare during the descent mission segment. A steady-state descent was in progress as indicated by the decrease in altitude and the low engine torque pressure at the extreme left of the figure. The flare begins with the application of engine torque and the decrease in the rate of descent. The flare terminates in a steady-state hover, followed by a touchdown.

Following the identification of the various flight conditions in each mission segment, the editors marked the traces to govern the data reading. Except for two differences, the procedures for the FCR technique were the same as those for the Four Mission Segment technique. Both of these differences involved the vertical acceleration trace. First, the thresholds of 0.8g and 1.2g (actually 0.84g and 1.16g for reading) were used for all flight conditions except for left and right turns; for turns, the thresholds were 0.9g and 1.1g (actually 0.94g and 1.06g for reading). This reduced threshold was used to counter the apparent reduction of vertical accelerations due to helicopter fuselage banking during the turn. The second difference was the measure of the duration of the vertical acceleration trace above the threshold values. All other procedures previously discussed in the Four Mission Segment Data Processing paragraph were also used during the FCR processing.

TABLE III. FLIGHT CONDITIONS USED IN THE FCR TECHNIQUE				
Flight Condition	No.	Mission Segment	Duration (Min.)	Characteristics
Rotor Start	1	1	0.0	Torque and rotor rpm increase from below minimums.
Steady State	2	1,2, 3,4,5,7	>.1 >.2	Torque, rpm, sticks, and A/S are steady or varying slightly about a steady mean.
Transient	3	1,6	-	Period of rapidly varying torque and rpm.
Takeoff	4	2,3	-	N_z change from ground to air; torque increasing.
Collective Pushover	5	2,3,4,5	-	Collective decrease to terminate or reduce ascent or to initiate or increase descent; torque decrease; negative n_z peak.
Collective Pull-up	6	2,3,4,5,7	-	Collective increase to initiate level flight or ascent or to decrease rate of descent; torque increase; positive n_z peak.
Flare	7	4,5,7	>.1	Same as a collective pull-up but occurring in ground effect immediately before landing or hover.
Touchdown	8	2,4,5,7	0.0	N_z changes from flight to ground characteristics.
Rotor Stop	9	1	0.0	Torque and rotor speed decrease to below minimums.
	(10) not used			(Allocated for a flight condition which was later omitted.)
Left Turn	11	2 3,4,5,7	>.1 >.2	Lateral stick moves left at entry and returns to mean, but moves right at recovery and returns to mean; rudder deflects left at initiation and returns to mean at termination; varying torque and/or A/S may affect the lateral and rudder characteristics; during a hover expect to see only the rudder characteristic.
Right Turn	12	2 3,4,5,7	>.1 >.2	Lateral stick moves right at entry and returns to mean, but moves left at recovery and returns to mean; rudder deflects right at initiation and returns to mean at termination; varying torque and/or A/S may affect the lateral and rudder characteristics; during a hover expect to see only the rudder characteristic.

TABLE III - Concluded				
Flight Condition	**No.**	**Mission Segment**	**Duration (Min.)**	**Characteristics**
Cyclic Pushover	13	2,3,4,5	-	Forward longitudinal cyclic to terminate or reduce ascent or to initiate descent while in flight; negative n_z peak.
Cyclic Pull-up	14	2,3,4,5	-	Aft longitudinal cyclic to initiate ascent while in flight or to terminate or decrease rate of descent; A/S decrease and/or torque increase; positive n_z peak.
Longitudinal Reversal	15	2,3,4,5,7	<.1	Longitudinal stick position peak exceeding 10% full stick deflection and not related to another flight condition.
Lateral Reversal	16	2,3,4,5,7	<.1	Lateral stick position peak exceeding 10% full stick deflection and not related to another flight condition.
Rudder Reversal	17	2,3,4,5,7	<.1	Rudder position peak exceeding 10% full rudder deflection and not related to another flight condition.
Left-Sideward Flight	18	2	>.1	Lateral stick deflects to left and returns; collective and torque may increase slightly.
Right-Sideward Flight	19	2	>.1	Lateral stick deflects to right and returns; collective and torque may increase slightly.
Rearward Flight	20	2	>.1	Longitudinal stick deflects aft and returns; collective and torque may increase slightly.
Ground Taxi	21	1	-	N_z will not be characteristic of ground conditions, but A/C is on the ground.
Initiation of Ascent	22	2,3	-	Collective input; torque increase; and positive n_z peak.
End in Flight	23	1,2,3,4, 5,6,7	0.0	Recorder ran out of paper or malfunctioned.
Mission Segment Variation	24	3,4,5	0.0	No obvious pull-up or pushover between mission segments.
Begin in Flight	25	1,2,3,4, 5,6,7	0.0	Recorder started in middle of flight.

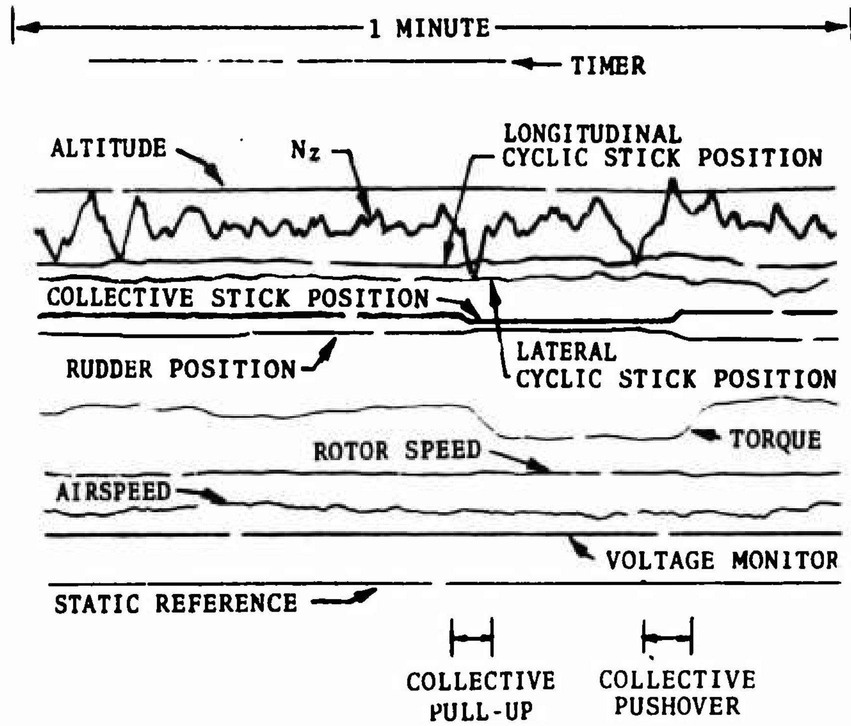

Figure 4. Oscillogram Showing Collective Pull-up.

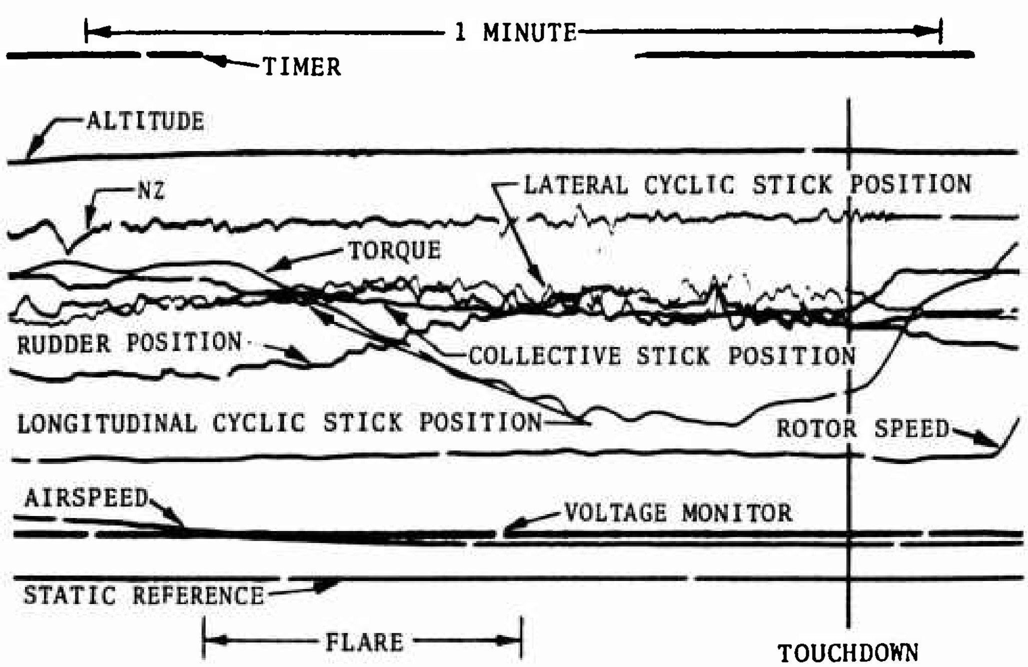

Figure 5. Oscillogram Showing Flare.

Following the editing of each oscillogram, the data were measured on semiautomatic oscillogram readers and the measurements were converted into engineering units. These operations are discussed in the following paragraphs.

DATA READING AND QUALITY CONTROL

All data points selected during the editing for each data processing technique were measured on semiautomatic oscillogram readers which transcribed the measurements directly onto punched cards. When all data were extracted from a flight, a printout of the cards was given to the quality control personnel for preliminary data checking. Using standard quality control techniques, these personnel manually remeasured points constituting an adequate random sample and compared the measurements with those produced on the semiautomatic readers. The differences obtained between the two sets of readings were used to establish the mean and standard deviations as a control of the desired accuracy. The flights whose measurements did not meet the accuracy standard so established were reread on the semiautomatic readers. In addition to obtaining accurate values, this procedure ensured a uniform interpretation and measurement of the traces.

When all data had been processed, the mean and the standard deviation were calculated for the entire data sample. Assuming a normal distribution of reading errors, 99.7 percent of the readings should be within three standard deviations of the true values. Based on average calibration values, Table IV shows the three-standard-deviation variation for each parameter.

FINAL DATA ACCEPTANCE

As the data for each flight were found acceptable by quality control, the data were processed on the CDC 6600 computer at Wright-Patterson Air Force Base. During the continuing data processing, the printouts of the processed data were compared with the corresponding oscillograms and supplementary data sheets to check extreme values and parameter distributions. If any errors in the data were detected, they were corrected and the entire flight was reprocessed through the computer.

After flights were found acceptable following either the initial printout review or the subsequent correction, their data were filed on a master tape containing the data from previously accepted flights. This procedure was repeated until the data for all flights were merged on the master tape. This tape

was then used to produce the various tapes needed to generate the tables presented in this report.

TABLE IV. DATA READING VARIATIONS FOR EACH PARAMETER

Parameter	3σ Variation FCR Data	3σ Variation Four Mission Segment Data
Altitude (at 2000 feet)	± 92 ft	± 136 ft
Airspeed (at 90 knots)	± 1.5 kn	± 3.0 kn
n_x	± 0.01g	± 0.02g
n_y	± 0.02g	± 0.04g
n_z	± 0.02g	± 0.04g
OAT	± 1.4°F	± 2.1°F
Rotor rpm	± 1.5 rpm	± 2.0 rpm
Engine Torque	± 0.5 psi	± 0.7 psi
Collective Boost Tube	± 34 lb	± 43 lb
Cyclic Lateral Boost Tube	± 19 lb	± 25 lb
Cyclic Longitudinal Boost Tube	± 26 lb	± 32 lb

DATA PRESENTATION AND ANALYSIS

INTRODUCTION

This section presents and analyzes separately the two groups of processed data: those processed by the Four Mission Segment technique and those processed by the FCR technique. In general, these data are compared with the flight spectra for the UH-1H helicopters flying in SEA; with the flight spectra data obtained for similar types of helicopters; with the empirical fatigue spectrum initially used to establish the preliminary component service lives; and with the empirical spectrum defined in the Civil Aeronautics Manual 6, Appendix A.

This data presentation and analysis covers 88 hours processed by the Four Mission Segment technique and 36 hours processed by the FCR technique. Fewer hours could be processed by the FCR technique because of the malfunctioning of the transducers for the required additional parameters, insufficient system sensitivity, and aircraft vibrational problems. Because of the great differences in the two data processing techniques, no data analysis was based on the direct comparison of the data processed by one technique with those processed by the other technique.

The data presented in this report consist of two types of figures and two types of tables. The two graphical presentations are cumulative frequency distribution curves of the percentage of time within various parameters such as airspeed, rotor speed, and engine torque; and "exceedance" curves, that is, curves of the number of flight hours required for a parameter, such as Δn_z, rate of climb, and boost tube load, to reach or exceed given levels (or curves of the cumulative number of parameter values at a given level per 1000 hours of flight). The two tabular formats are (1) flight time distributed among the coincident ranges of two or more parameters, and (2) frequency of acceleration peaks and incremental boost tube load peaks distributed among the coincident ranges of the peaking parameter and other variables. All times shown were rounded to the nearest tenth of a minute. Since in each subtable the total under the time column was computed and then rounded, a total may not agree with the sum of the rounded times in each line. Times between 0 and 0.05 minute were printed as ".0", and times equal to zero were printed as "0.0". Tables having neither points nor time were not printed. Table headings are arranged so that the first-mentioned variable refers to the horizontal ranges at the top of the table and the second-mentioned variable refers to the vertical ranges at the left of the table. Where a third or a fourth variable is given, it is

followed by its range in the heading. As an example, the heading "MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 BY MISSION SEG. ASCENT" indicates the time spent in the coincident ranges of altitude and airspeed at a weight between 6000 and 7000 pounds during the ascent mission segment. All printed range values are the lower limits.

Sample oscillograms are presented throughout this section to show various occurrences of maximum values of selected parameters. For each example, the values for rotor speed, indicated airspeed (V_i), density altitude, gross weight, μ, C_T/σ, outside air temperature (OAT), rate of climb, and engine torque were calculated at a time splice near the n_z peak and written on a reproduction of the oscillogram section containing the maneuver. Then the recorded traces were identified by the parameter name: the reference lines for torque = 0 psi, n_z = 1.0g, rotor speed = 0.0 rpm, and V_i = 0.0 knot were indicated; and the calibration slopes (parameter change for " J-inch trace deflection) for torque, n_z, rotor speed, an·l were noted. The following list gives the sign convention fo .he UH-1H oscillograph recording system:

(1) Airspeed moves up the chart as airspeed increases.

(2) Altitude moves down the chart as altitude increases.

(3) Rotor speed moves down the chart as rpm increases.

(4) Torque moves down the chart as torque increases.

(5) N_x, N_y movement up the chart is positive and down is negative.

(6) N_z movement up the chart is negative and down is positive.

(7) Longitudinal control movement up the chart is forward movement.

(8) Lateral control movement up the chart is left movement.

(9) Collective control moves down the chart as collective increases.

(10) Rudder control movement up the chart is left movement.

(11) Longitudinal cyclic boost tube load moves down the chart when the load is positive (tensile).

(12) Lateral cyclic boost tube load moves up the chart when the load is positive (tensile).

(13) Collective boost tube load moves up the chart when the load is positive (tensile).

FOUR MISSION SEGMENT DATA PRESENTATION

The following presentation of the 88 hours processed by the Four Mission Segment technique is divided into eleven sections: mission segments, airspeed, rotor speed, gross weight, engine torque, altitude, outside air temperature, rate of climb, normal load factor, control boost tube load, and miscellaneous parameters.

Mission Segments

On the basis of the mission segments of ascent, maneuver, descent, and steady state defined in the Data Definitions section, the current (Alaskan) UH-1H data are compared in Figure 6 with the UH-1H fatigue spectrum[7], with the CAM-6 spectrum[8], and with operational usage data for the UH-1H operating in SEA (see Reference 1).

The Alaskan UH-1H helicopters spent the following percentages of time in each of the four mission segments: ascent, 18 percent; maneuver, 1 percent; descent, 17 percent; and steady state, 64 percent.

The comparison of the Alaskan data with the SEA data reveals that the helicopters in both environments spent similar amounts of time in the various mission segments but that they did not fly according to the design or the CAM-6 spectrum. As discussed in Reference 1, the current data again demonstrate the individuality of flight spectra and the importance of mission assignment in establishing the characteristics of the operational usage spectrum.

Airspeed

The airspeed frequency distribution for the current UH-1H data is presented in several different formats for analysis purposes.

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[7] Excerpts from FATIGUE SUBSTANTIATION OF MAIN ROTOR, TAIL ROTOR, AND CONTROL COMPONENTS FOR THE UH-1D/UH-1H HELICOPTER, Bell Helicopter Company, Fort Worth, Texas; Bell Helicopter Report No. 205-099-135.

[8] Federal Aviation Agency, ROTORCRAFT AIRWORTHINESS: NORMAL CATEGORY, Civil Aeronautics Manual 6, Appendix A, June 1962.

These formats include airspeed comparisons of the current UH-1H data with the CAM-6 data, the existing UH-1H fatigue spectrum, and the operational flight data for helicopters weighing less than 10,000 pounds. The recorded values of airspeed are presented in terms of V_{n_e} percentage.

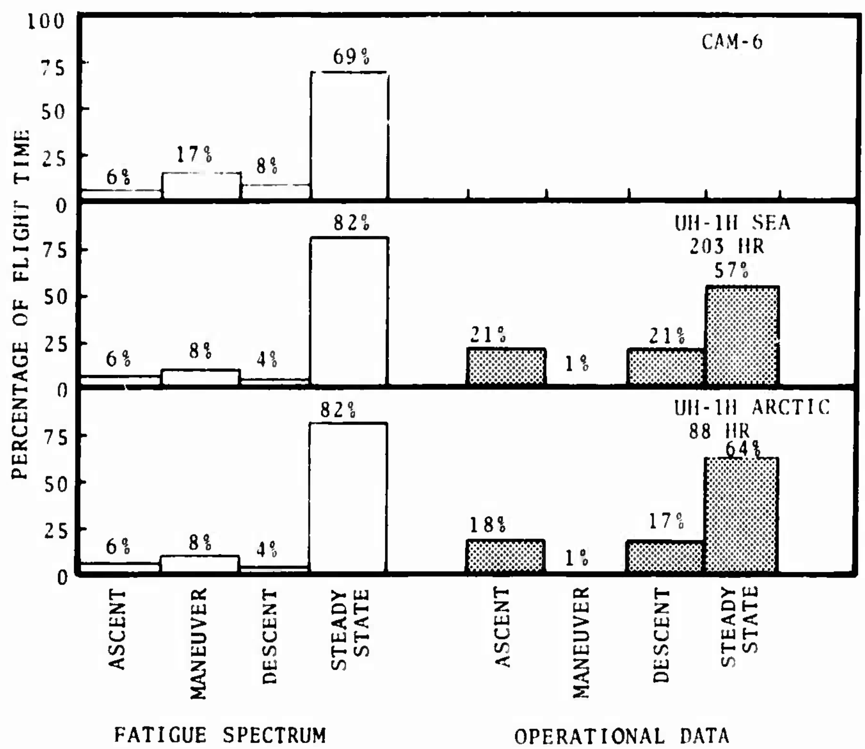


Figure 6. Comparison of Operational Data and Fatigue Spectra for UH-1H Helicopters.

With a breakdown by mission segment, Figure 7 distributes the cumulative airspeed frequency for the current UH-1H data; these data are listed in Table XLII of Appendix I. This figure indicates that the V_{n_e} limit was exceeded during the ascent, descent, and steady-state mission segments. The maximum observed airspeed was 129 knots, which occurred during the descent mission segment as depicted in Figure 8.

Figure 9 compares the cumulative airspeed frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. Except for the higher Alaskan data curve at the higher airspeeds, the two curves have generally the same shape.

Figure 10 compares the cumulative airspeed frequency distribution for the current UH-1H data with those for the CAM-6 spectrum and the UH-1H design fatigue spectrum. Below 83% V_{n_e}, the agreement between the current UH-1H data and the curves for the

two spectra is poor; but above 83% V_{ne}, the agreement between the current data and the curve for the UH-1H spectrum is good. If it is assumed that most of the fatigue damage occurs at higher airspeeds, then the CAM-6 and UH-1H fatigue spectra are not necessarily conservative.

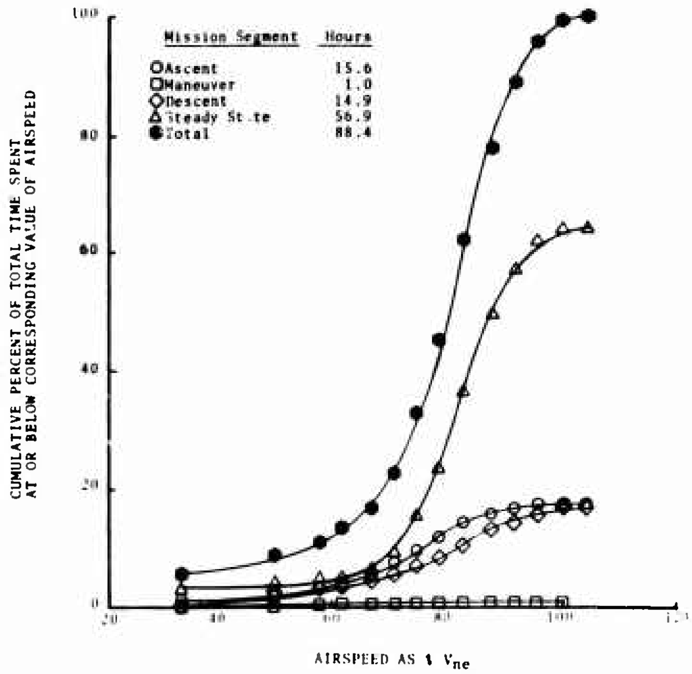
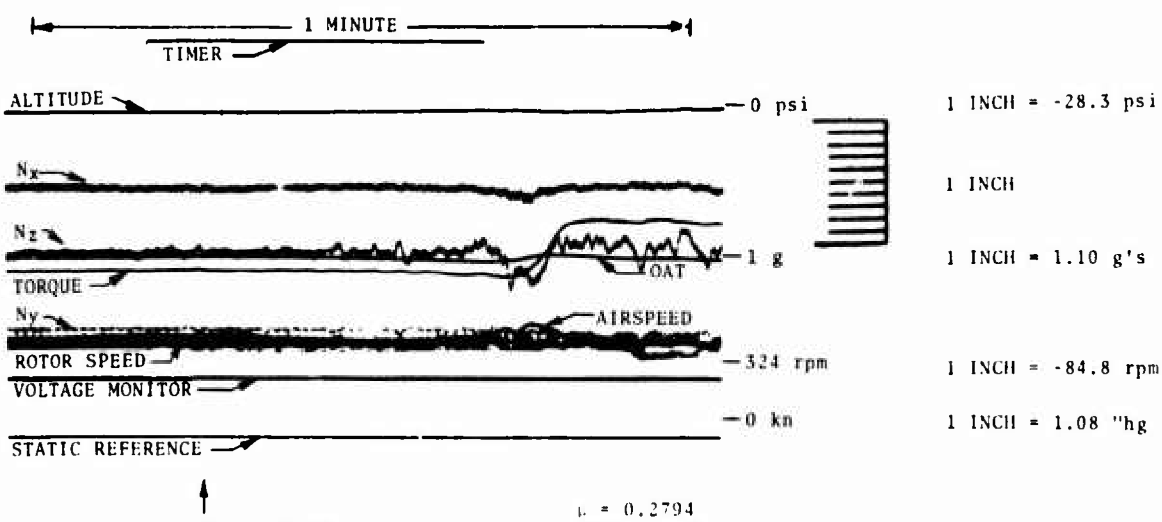


Figure 7. Cumulative Airspeed Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.



V_i = 129 kn
Rotor speed = 311 rpm
Density altitude = 940 ft
Gross weight = 7245 lb

μ = 0.2794
C_T/σ = 0.0611
Climb rate = 242 ft/min
Outside air temperature = 17.8°F
Engine torque = 33.2 psi

Figure 8. Oscillogram Showing Maximum Airspeed During Descent Mission Segment.

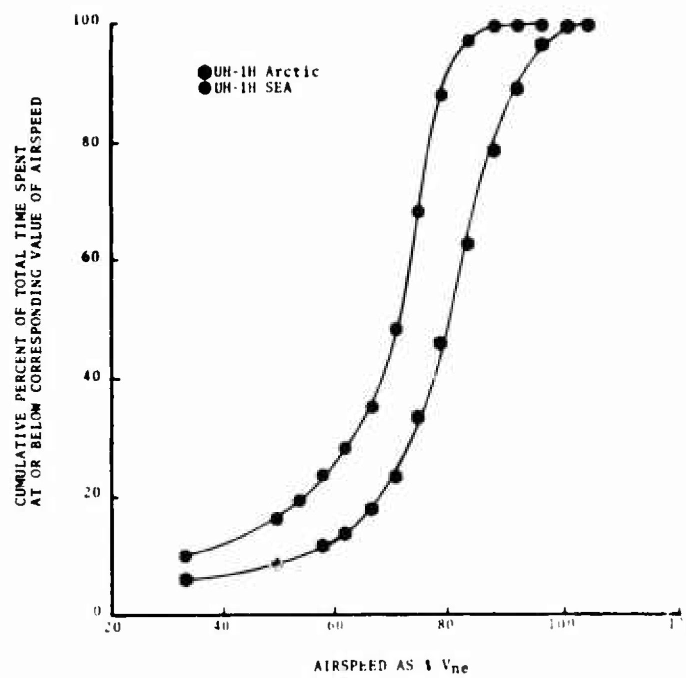


Figure 9. Comparison of Cumulative Airspeed Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

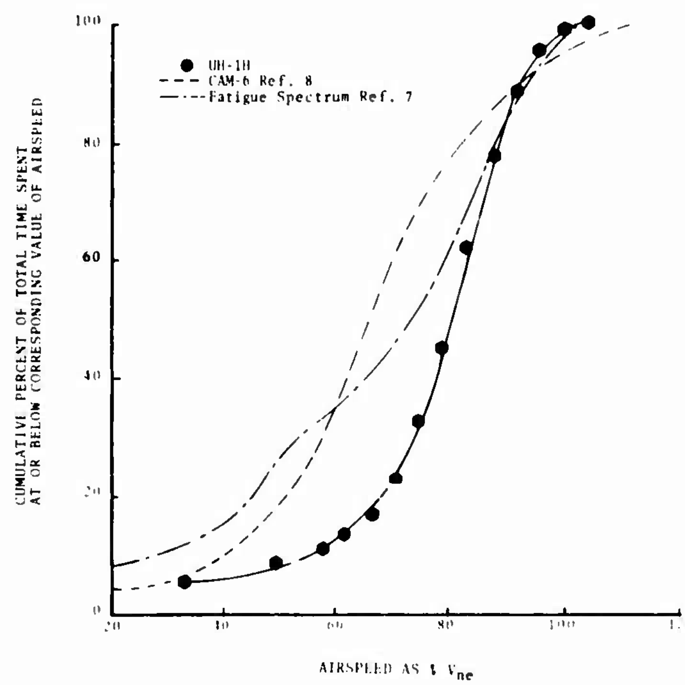


Figure 10. Cumulative Airspeed Frequency Distribution for Current Alaskan UH-1H Data Compared With Those for CAM-6 and Design Fatigue Spectra.

Figure 11 compares the cumulative airspeed frequency distribution for the current UH-1H data with data previously recorded for turbine-powered helicopters having design normal gross weights less than 10,000 pounds. To simplify this comparison, only the $\pm 1\sigma$ scatterband curves obtained by statistical analysis and presented in Reference 1 are shown. Above 85% V_{ne}, the current UH-1H data fall within the two curves; but below 85% V_{ne}, the current data fall below the lower scatterband, indicating that the Alaskan helicopters spent less time in these airspeed ranges than the time represented by the lower scatterband.

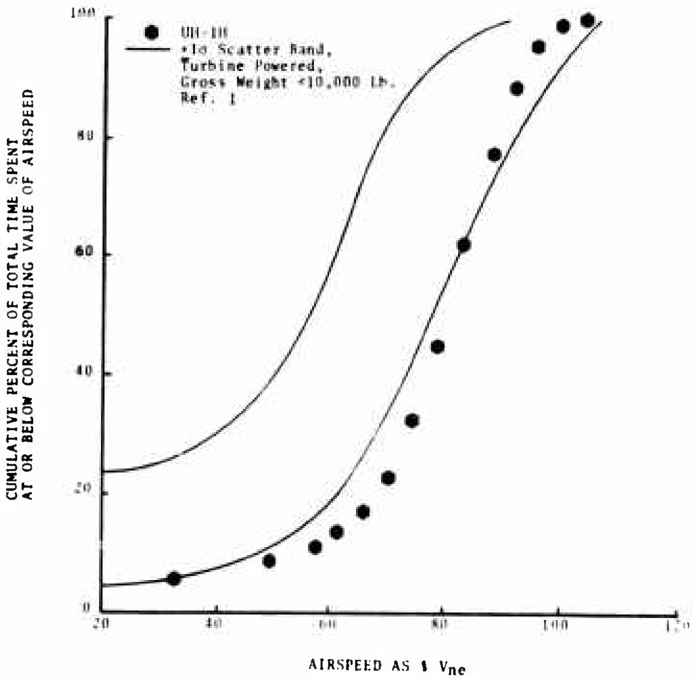


Figure .11. Cumulative Airspeed Frequency Distribution for Current Alaskan UH-1H Data Compared With Those for Spectra Representing Other Turbine-Powered Helicopters With Design Normal Gross Weight < 10,000 Lb.

Rotor Speed

With a breakdown by mission segment, Figure 12 presents in rpm ranges the cumulative rotor speed frequency distribution for the current UH-1H data. These data are listed in Table XLVII of Appendix I. Figure 12 shows that 66.4, 5.8, and 27.7 percent of the recorded flight time were acquired at rotor rpm's between 314 and 324, below 314 rpm, and above 324 rpm, respectively. The maximum rotor speed during the data acquisition program was 342 rpm; this rpm occurred during an autorotation (maneuver mission segment) as depicted in Figure 13.

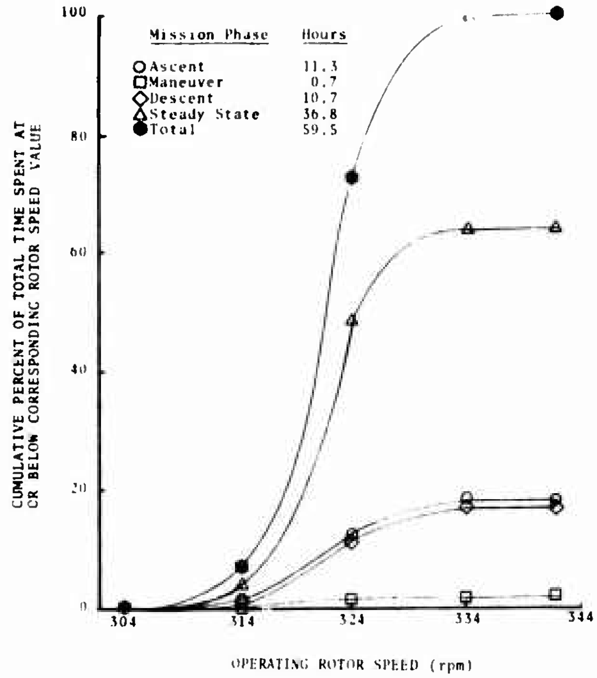
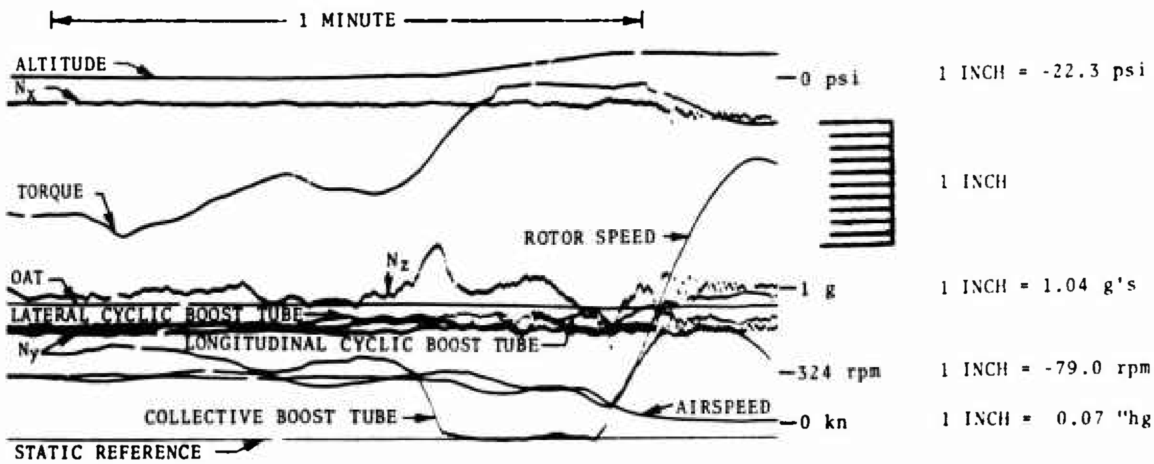


Figure 12. Cumulative Rotor Speed Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.



Rotor speed = 342 rpm
V_i = 60 kn
Density altitude = -1929 ft
Gross weight = 6682 lb
μ = 0.1191
C_T/σ = 0.0429
Climb rate = -793 ft/min
Outside air temperature = 7.2°F
Engine torque = 1.0 psi

Figure 13. Oscillogram Showing Maximum Rotor Speed During Maneuver Mission Segment.

Figure 14 compares the cumulative rotor speed frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. Except for the higher Alaskan data curve at the lower rotor speeds, the two curves have generally the same shape.

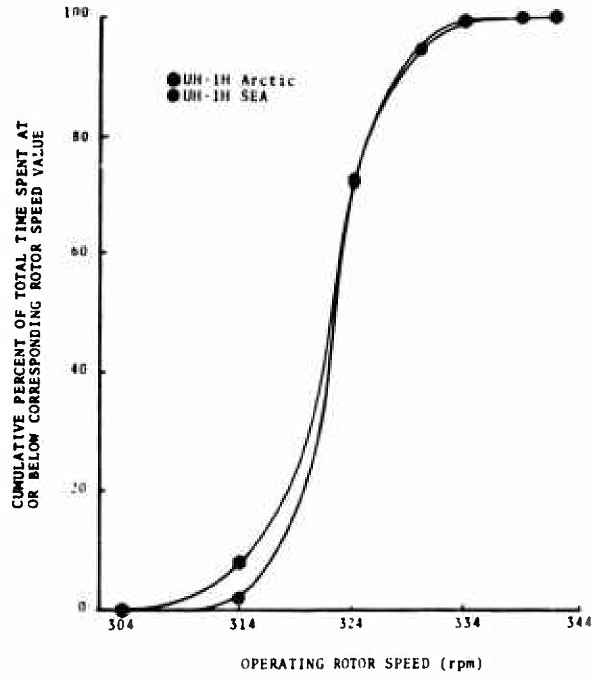


Figure 14. Comparison of Cumulative Rotor Speed Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

Gross Weight

With a breakdown by mission segment, Figure 15 presents the cumulative gross weight frequency distribution for the current UH-1H data in ranges of the ratio of operating gross weight to maximum design gross weight; these data are listed in Table XLVI of Appendix I. As apparent, the current UH-1H's spent approximately 15 percent of the flight time at gross weights at or in excess of the UH-1H maximum design gross weight. During this program, a helicopter flying a logistic support mission had the maximum gross weight of 10,161 pounds.

Figure 16 compares the cumulative gross weight frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. The two curves closely agree except at the higher gross weights where the Alaskan data curve is higher. About 4 percent of the flight time during the Alaskan operations was spent at gross weights above the design maximum. This high gross weight operation may be attributed to the greater power available at the low ambient temperatures and special mission requirements.

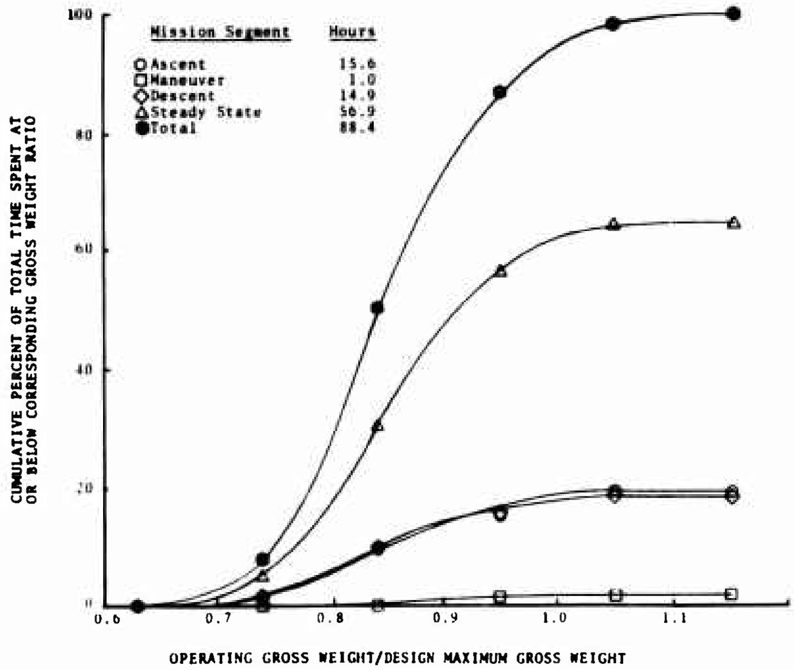


Figure 15. Cumulative Gross Weight Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.

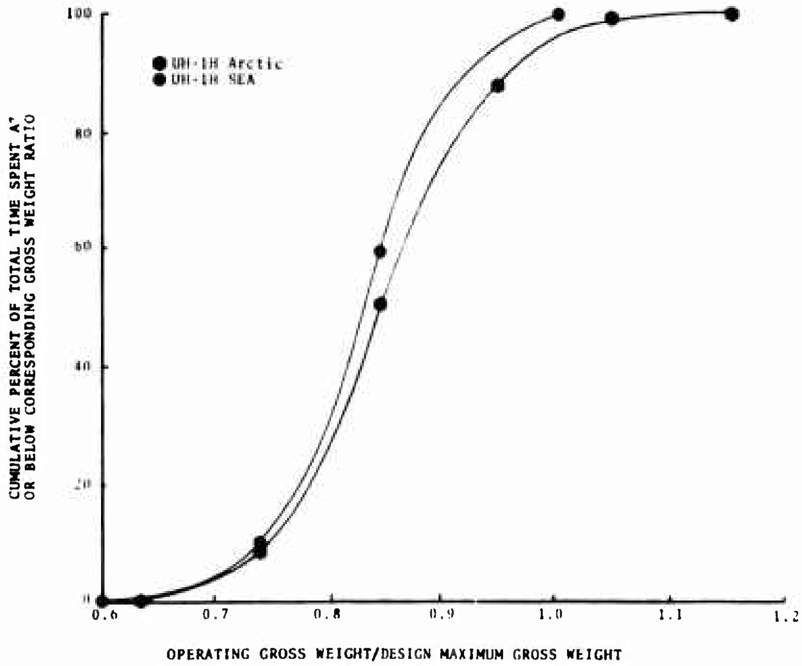


Figure 16. Comparison of Cumulative Gross Weight Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

Engine Torque

With a breakdown by mission segment, Figure 17 presents the cumulative engine torque frequency distribution for the current UH-1H data in ranges of the percentage of the maximum allowable torque; these data are listed in Table XLVI of Appendix I. The torque meter pressure at 100 percent is 50 psi.

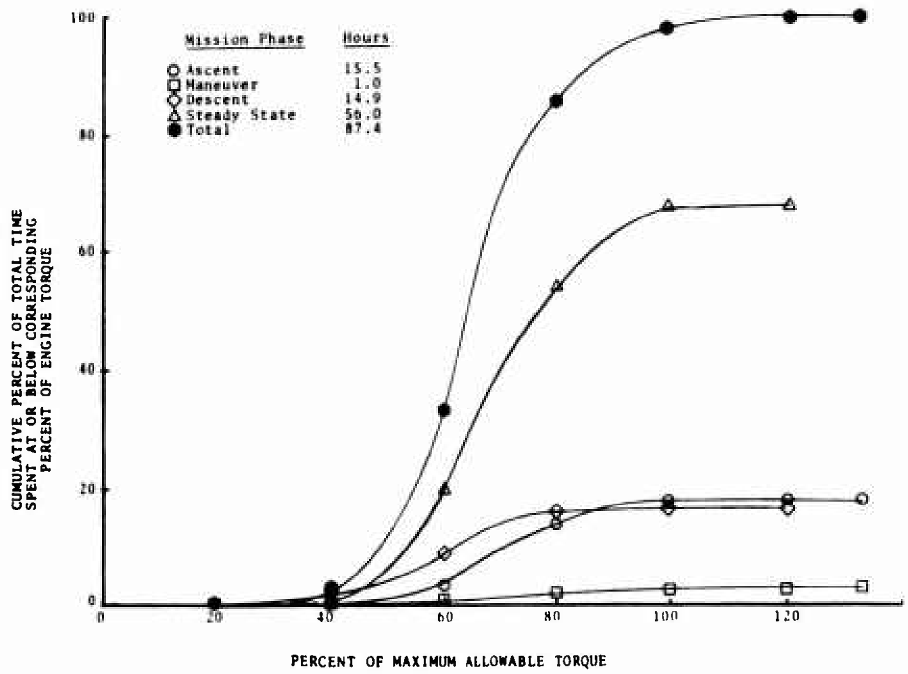
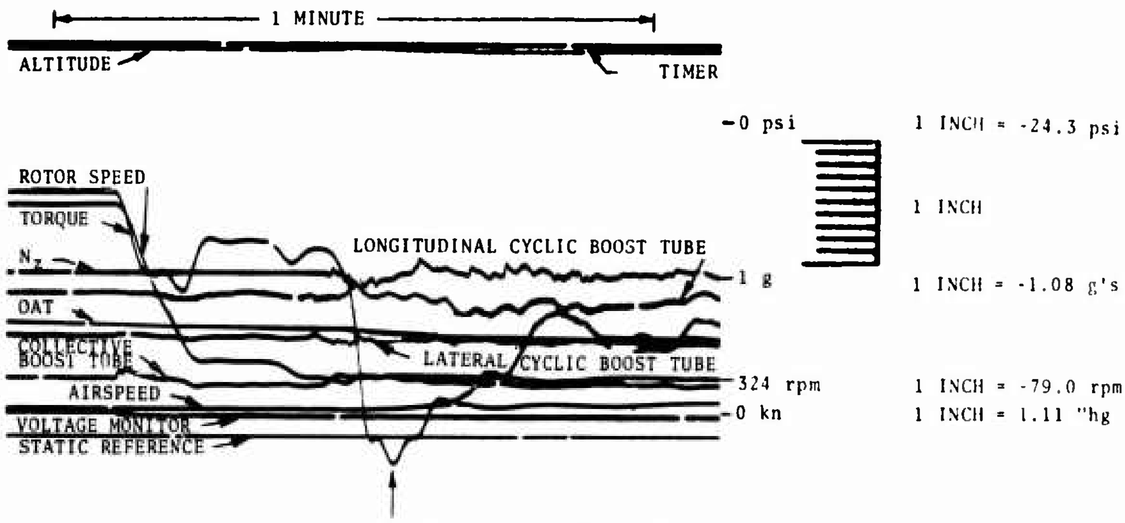


Figure 17. Cumulative Engine Torque Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.

Figure 17 indicates that the current UH-1H's spent 92 percent of the flight time below 100 percent of the maximum allowable torque. Two percent of the time was spent between 100 and 120 percent, and one percent was spent at 133 percent or 67 psi.

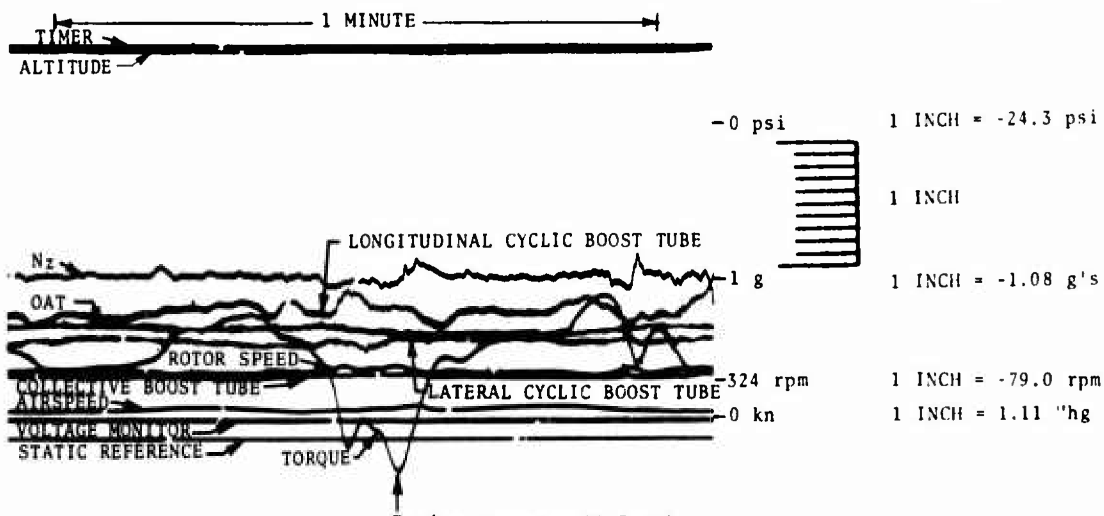
Maximum torques of 66.4 and 66.7 psi were recorded during ascent and steady-state mission segments, as depicted in Figures 18a and 18b, respectively.

Figure 19 compares the cumulative engine torque frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. As apparent, the Alaskan UH-1H's spent more time at higher percentages of the maximum allowable torque. This condition would be expected since the lower ambient temperatures effectively provide more available power with which to exceed the transmission input limit. In addition, the operation at higher gross weights, as shown in Figure 16, would require higher power and therefore greater torque inputs.



Engine torque = 66.4 psi
Rotor speed = 324 rpm
V_i = 34 kn
Density altitude = -4799 ft
Gross weight = 8777 lb
μ = 0.0704
C_T/σ = 0.0578
Climb rate = 488 ft/min
Outside air temperature = -16.0°F

a) Maximum Engine Torque During Ascent Mission Segment.



Engine torque = 66.7 psi
Rotor speed = 314 rpm
V_i = 40 kn
Density altitude = -4804 ft
Gross weight = 8783 lb
μ = 0.0860
C_T/σ = 0.0616
Climb rate = 0 ft/min
Outside air temperature = -16.4°F

b) Maximum Engine Torque During Hover Mission Segment.

Figure 18. Oscillograms Showing Maximum Engine Torque.

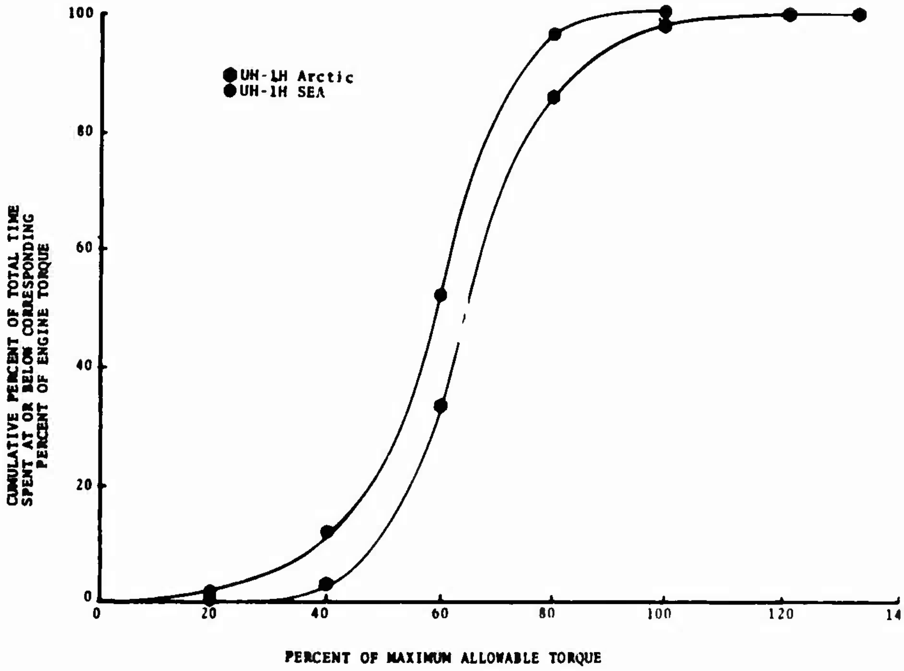


Figure 19. Comparison of Cumulative Engine Torque Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

Outside Air Temperature

Figure 20 compares the OAT frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data; these data are listed in Table XLVII of Appendix I. As indicated, the temperatures in the Alaskan operations had a greater range than those in the SEA operations.

Altitude

With a breakdown by mission segment, Figure 21 presents in density altitude ranges the cumulative density altitude frequency distribution for the current UH-1H data; these data are listed in Table XLVIII of Appendix I. Figure 22 compares the cumulative density altitude frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. The Alaskan UH-1H's operated at lower density altitudes because of the lower ambient temperatures.

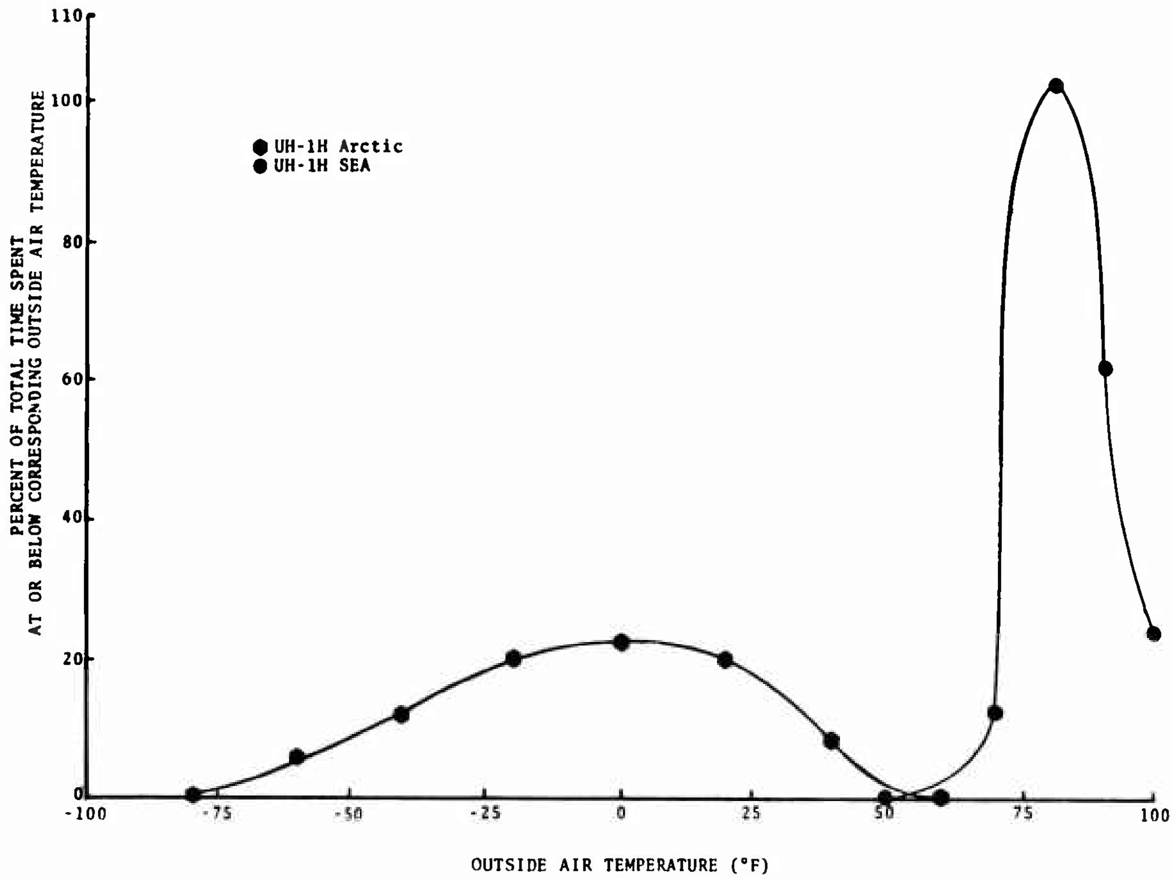


Figure 20. Comparison of Outside Air Temperature Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

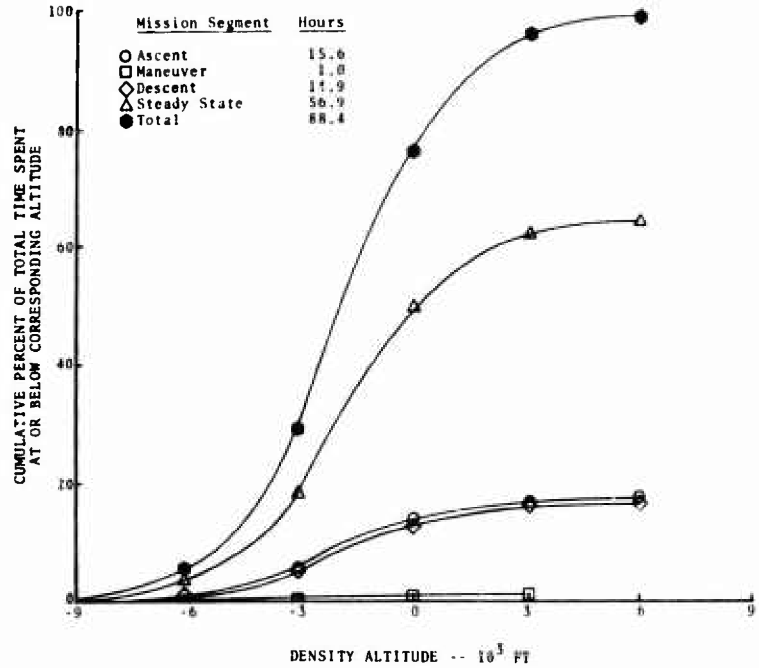


Figure 21. Cumulative Density Altitude Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.

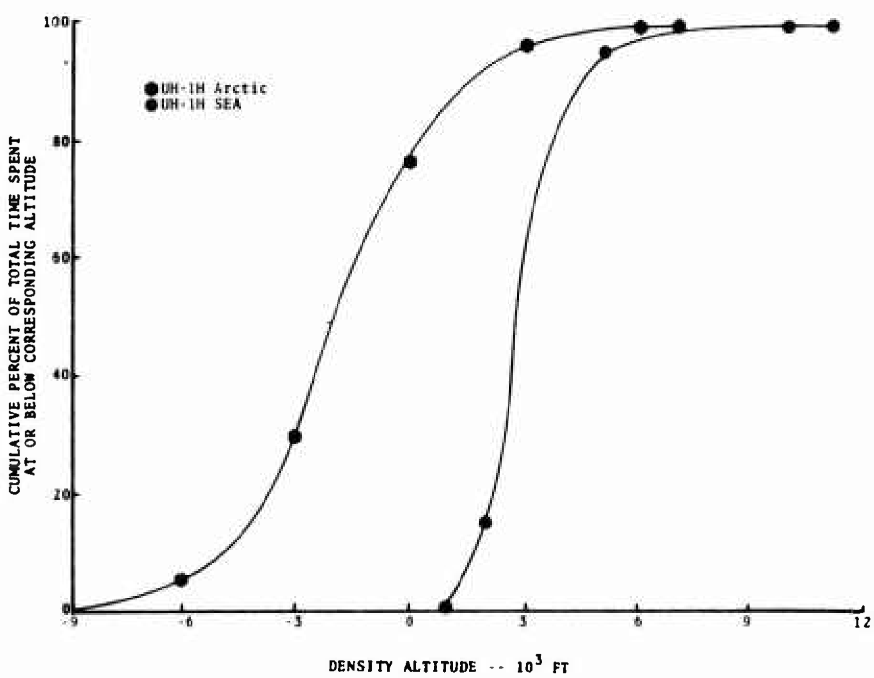


Figure 22. Comparison of Cumulative Density Altitude Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

Rate of Climb

With a breakdown by mission segment, Figure 23 presents the cumulative rate-of-climb frequency distribution for the current UH-1H data in rate-of-climb ranges. The rate-of-climb data were converted into the "or more" type of frequency distributions by cumulatively summing the percentages of time for each rate-of-climb range, starting at the highest positive or negative rate-of-climb value and continuing to the ±300 feet-per-minute threshold value. The basic data, prior to summation, are presented in Table XLVII of Appendix I. Because of the basic definitions used to categorize the flight data into the four mission segments, some ascent time is included in the negative rate-of-climb data and some descent time is included in the positive rate-of-climb data.

Figure 24 compares the cumulative rate-of-climb frequency distribution for the Alaskan UH-1H data with that for the SEA UH-1H data. Although the Alaskan UH-1H's had higher rates of climb, they spent less time in ascent and descent.

Figure 25 compares the cumulative rate-of-climb frequency distribution for the current UH-1H's with that for other turbine-powered helicopters having a normal design gross weight of less than 10,000 pounds.[9] The current UH-1H data for positive rates of climb fall within the scatterbands; however, the data for negative rates of climb fall outside the lower scatterband. For both positive and negative rates of climb, the rate of ascent or descent was relatively low.

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[9] Porterfield, John D., and Maloney, Paul F., EVALUATION OF HELICOPTER FLIGHT SPECTRUM DATA, Kaman Aircraft Division, Kaman Corporation, Bloomfield, Connecticut; USAAVLABS Technical Report 68-68, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, October 1968, AD 680 280.

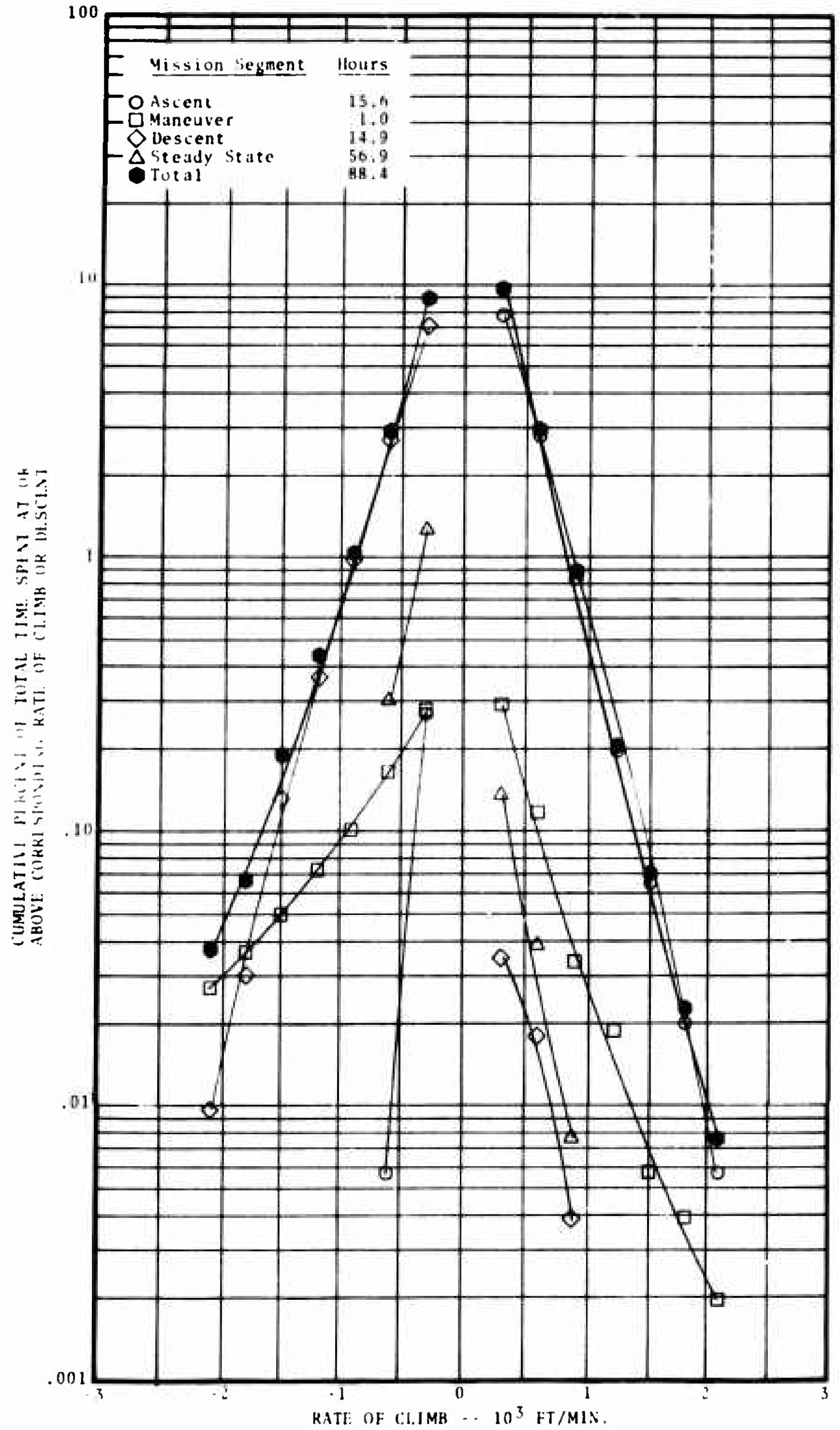


Figure 23. Cumulative Rate-of-Climb Frequency Distribution by Mission Segment for Current Alaskan UH-1H Data.

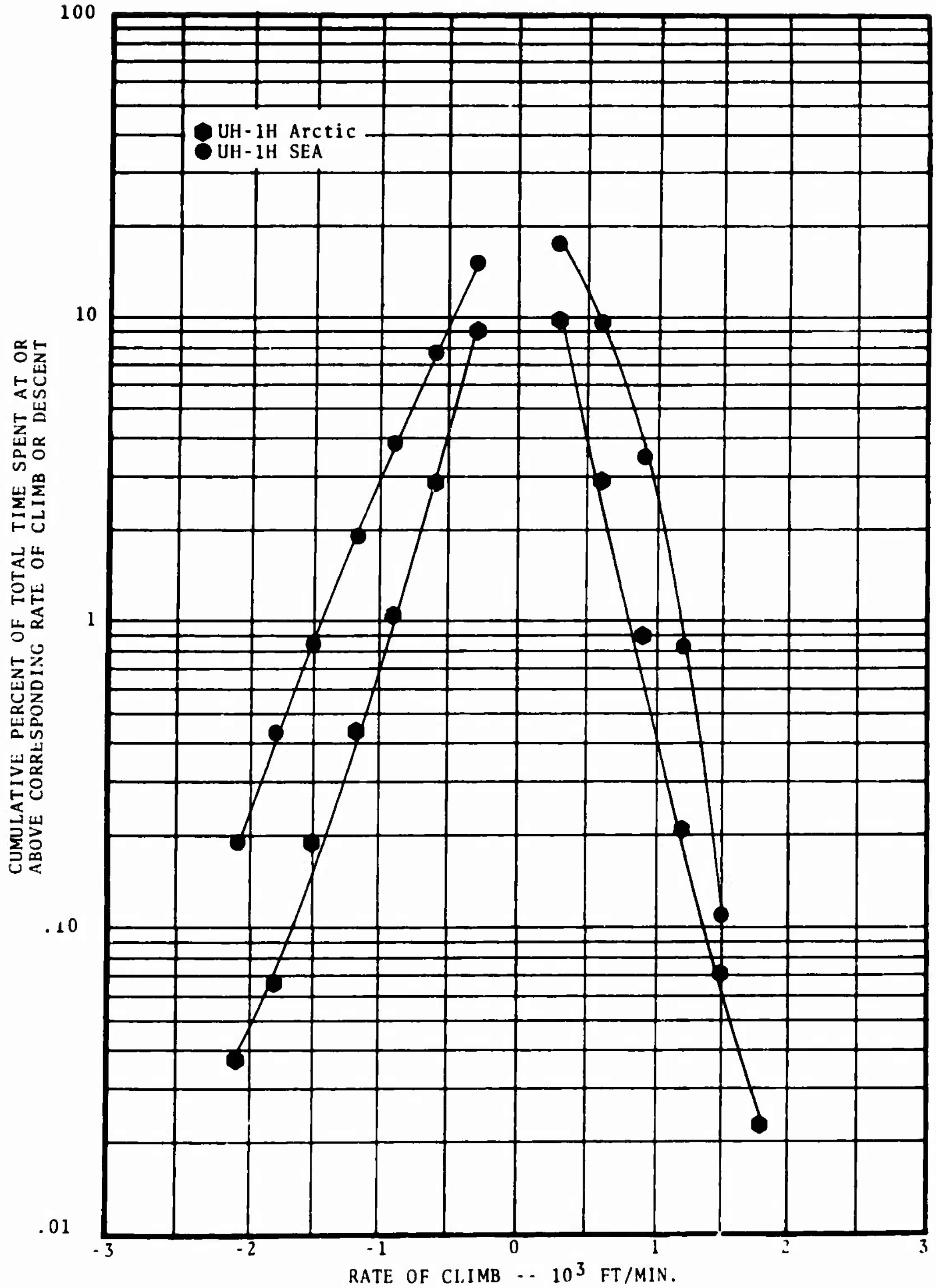


Figure 24. Comparison of Cumulative Rate-of-Climb Frequency Distribution for Current Alaskan UH-1H Data With That for Previous SEA UH-1H Data.

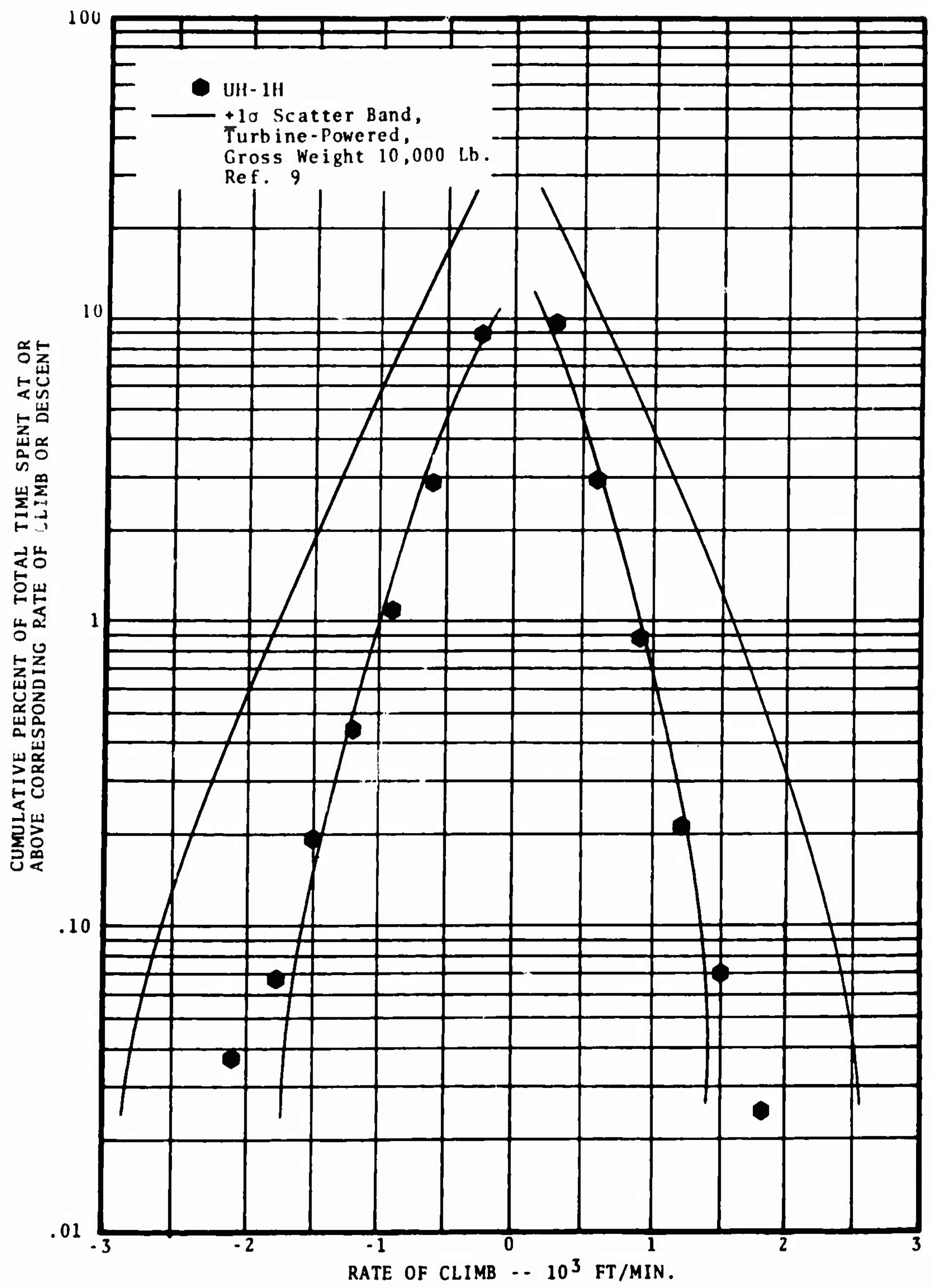


Figure 25. Cumulative Rate-of-Climb Frequency Distribution for Current Alaskan UH-1H Data Compared With Those for Spectra Representing Other Turbine-Powered Helicopters With Design Gross Weight < 10,000 Lb.

Normal (Vertical) Load Factor

Both positive and negative vertical acceleration peaks recorded by the current UH-1H helicopters are presented as normal load factors in several different ways for both gust and maneuver conditions. The peaks caused by gust conditions are compared with $\pm 1\sigma$ scatterbands for all helicopters, and those caused by maneuvers and distributed in gross weight and rotor tip speed ranges are compared similarly with airspeed.

Three different types of exceedance curves were used to present the data in the formats discussed above. The basic vertical acceleration data for gust and maneuver conditions are presented in terms of "hours to reach or exceed" a given normal load factor level. The comparisons of either the gust or the maneuver data are presented as the cumulative number of normal load factors per 100 hours experienced at or in excess of each of the given Δn_z levels; these numbers were obtained by cumulatively summing the occurrences of normal acceleration peaks, starting at the largest positive or negative peak, and then converting the values of these occurrences to cumulative normal load factors per 100 hours. The format for comparing the cumulative normal load factors with airspeed is similarly based on the cumulative number of normal load factors per 100 hours experienced at or below each of the given airspeed levels. The airspeed values were expressed in terms of the percentage of V_{ne}, which is 120 knots for the UH-1H helicopter.

Figure 26 presents the composite exceedance curve of gust-induced incremental normal load factors for the current UH-1H data. As apparent, the negative peaks were generally larger and occurred slightly more frequently than the positive peaks. In contrast to the data presented in Reference 1, the magnitudes of the gust-induced peaks were similar to those of the maneuver-induced peaks, as seen in Figure 31.

Oscillogram segments of the maximum and minimum gust-induced n_z peaks are presented in Figure 27. Coincident parameter values are presented for each of these gust conditions.

Figure 28 compares the cumulative gust-induced normal load factor frequency distribution of the current UH-1H data with the $\pm 1\sigma$ scatterband curves derived in Reference 9 for similar data for all turbine-powered helicopters. This figure indicates that the current data fall within the derived scatterbands.

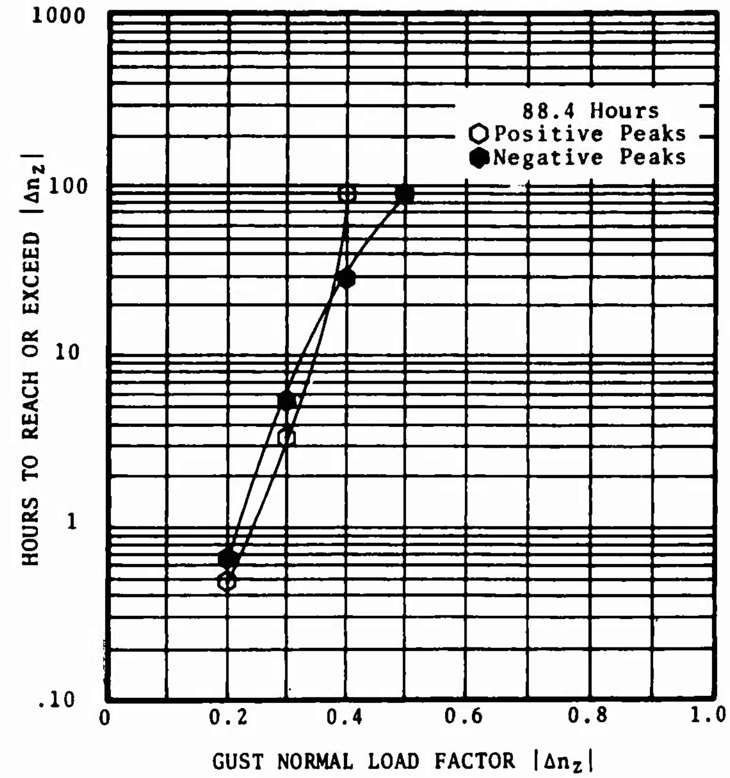
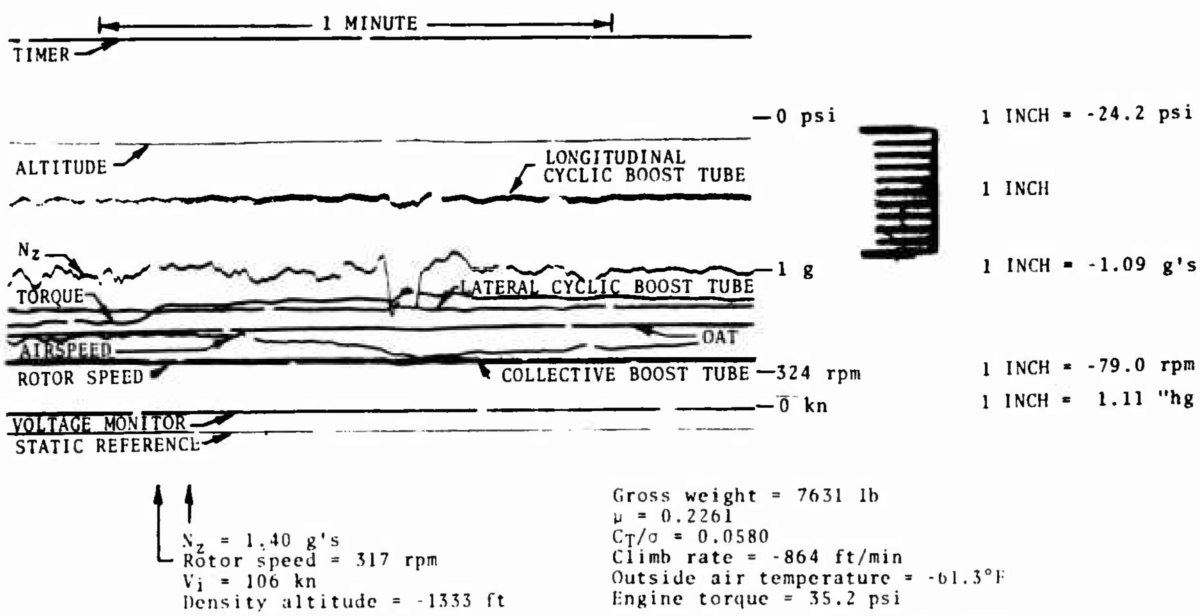
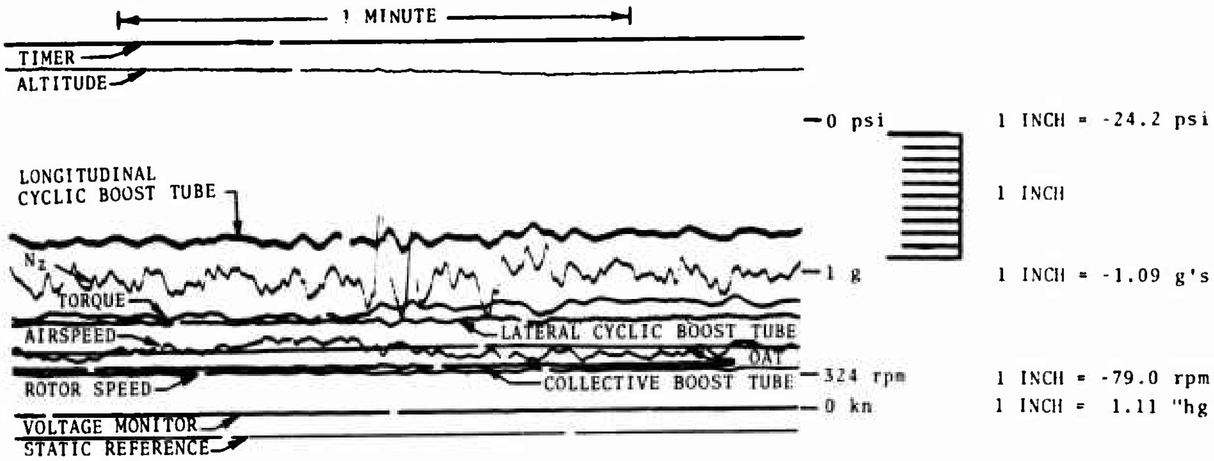


Figure 26. Composite Exceedance Curve for Incremental Gust Normal Load Factor Peak in Current Alaskan UH-1H Data.



a) Maximum Gust-Induced Normal Load Factors

Figure 27. Oscillograms Showing Gust-Induced Maximum and Minimum Incremental Normal Load Factors.



Nz = 0.11 g's
Rotor speed = 320 rpm
V_i = 109 kn
Density altitude = -2455 ft

Gross weight = 7819 lb
μ = 0.2302
C_T/σ = 0.0563
Climb Rate = 1058 ft/min
Outside air temperature = -29.6°F
Engine torque = 36.6 psi

b) Minimum Gust-Induced Normal Load Factors

Figure 27 - Concluded.

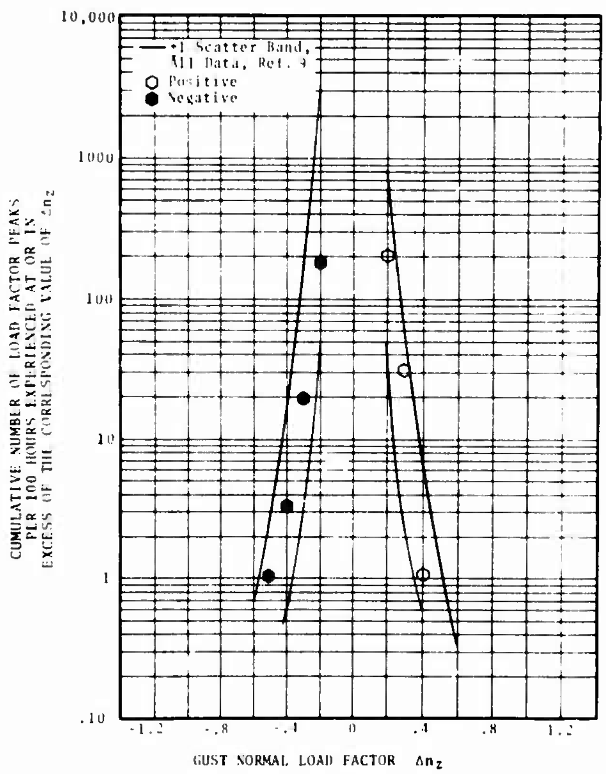


Figure 28. Cumulative Gust-Induced Normal Load Factor Distribution for Current Alaskan UH-1H Data Compared With Those for All Other Turbine-Powered Helicopter Data.

Figures 29 and 30 compare the cumulative gust-induced positive and negative normal load factor frequency distributions for the Alaskan UH-1H data with those for the SEA UH-1H data. As evident in both figures, the gust-induced loads for the Alaskan UH-1H's were greater in both frequency and magnitude than those for the SEA UH-1H's.

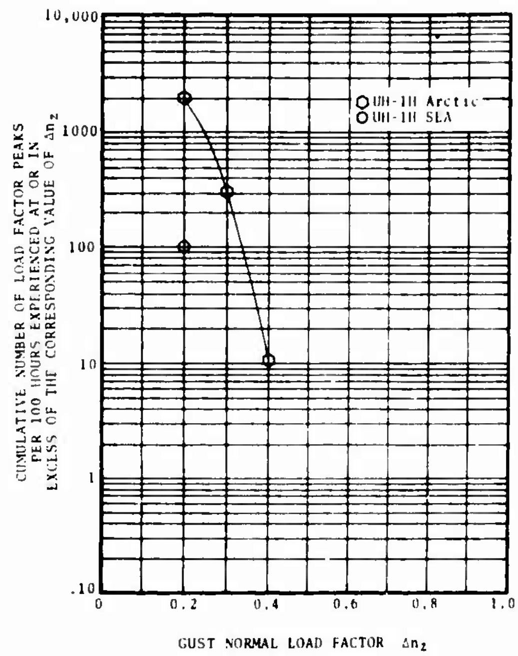


Figure 29.

Cumulative Gust-Induced Positive Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Previous SEA UH-1H Data.

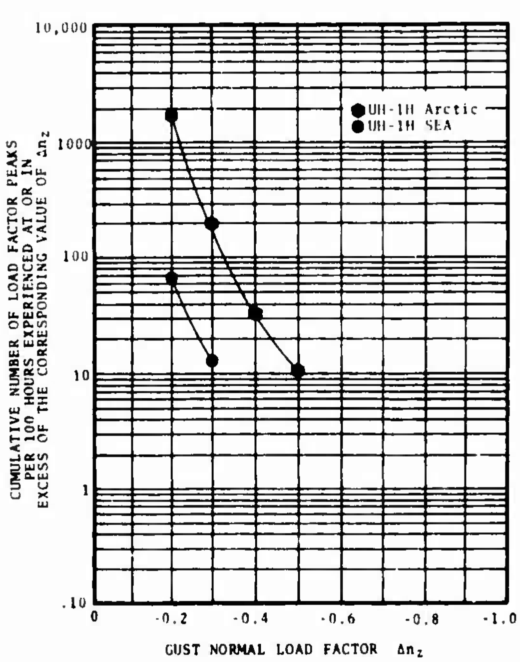
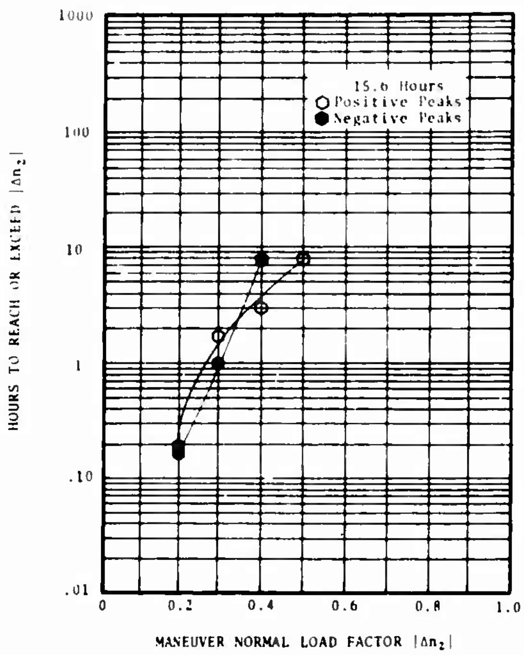


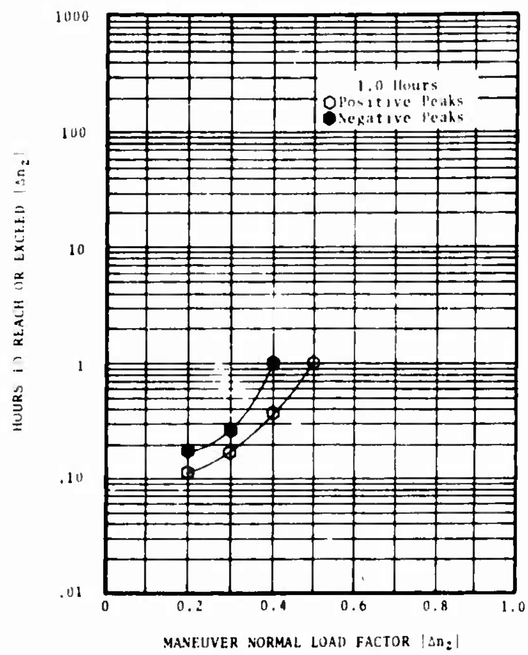
Figure 30.

Cumulative Gust-Induced Negative Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Previous SEA UH-1H Data.

With a breakdown by mission segment, Figure 31 presents exceedance curves of maneuver-induced incremental normal load factors for the current UH-1H data. In general, slightly more positive normal load factors were experienced during all mission segments than negative peaks. Also, both positive and negative peaks occurred most frequently in the maneuver mission segment. The occurrences of positive and negative peaks in the ascent and descent mission segments were nearly identical. Fewer positive and negative peaks occurred in the steady-state mission segment. The largest positive peak of 0.5g and the largest negative peak of 0.4g occurred during all mission segments. Finally, the composite maneuver-induced normal load factor curve in Figure 31e indicates that the positive and negative peaks in the current UH-1H data attained nearly the same magnitude.

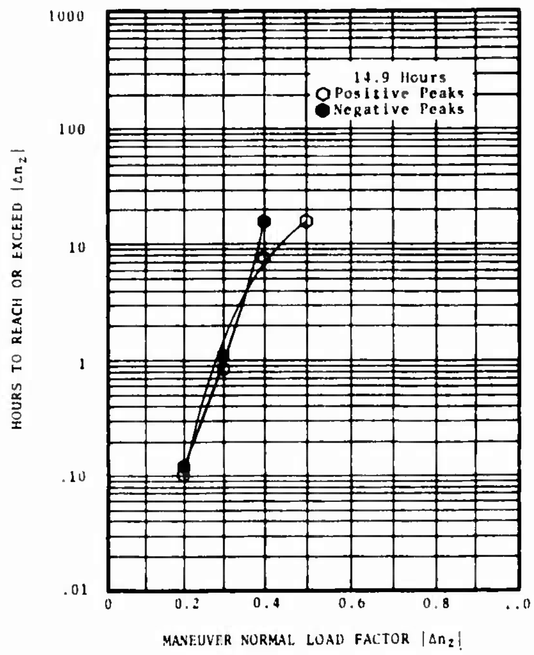


a) Ascent

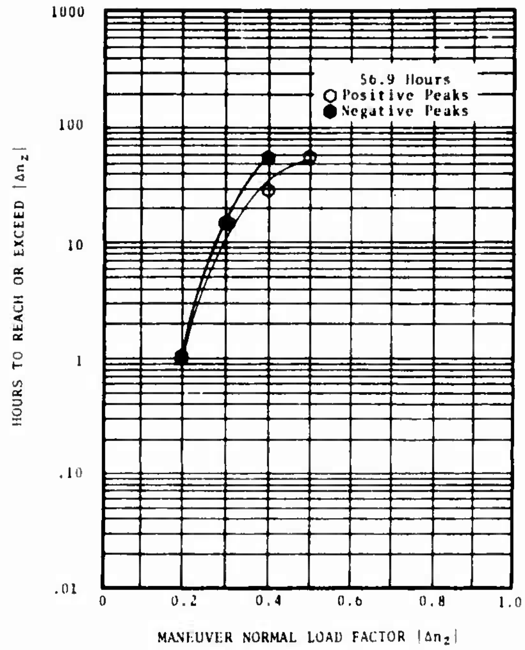


b) Maneuver

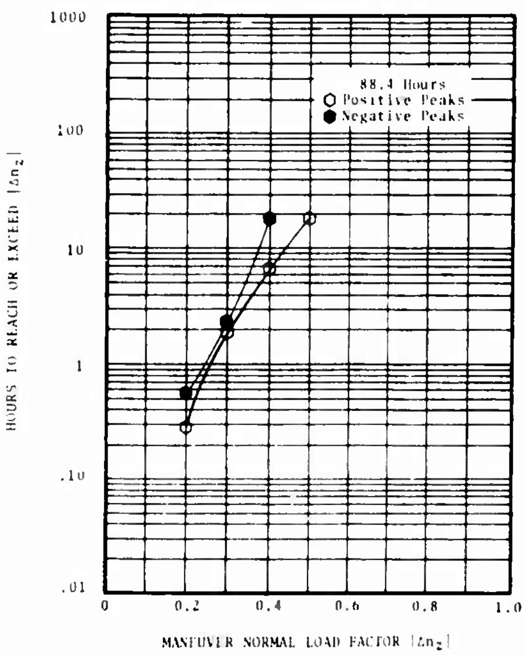
Figure 31. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Mission Segment for Current Alaskan UH-1H Data.



c) Descent



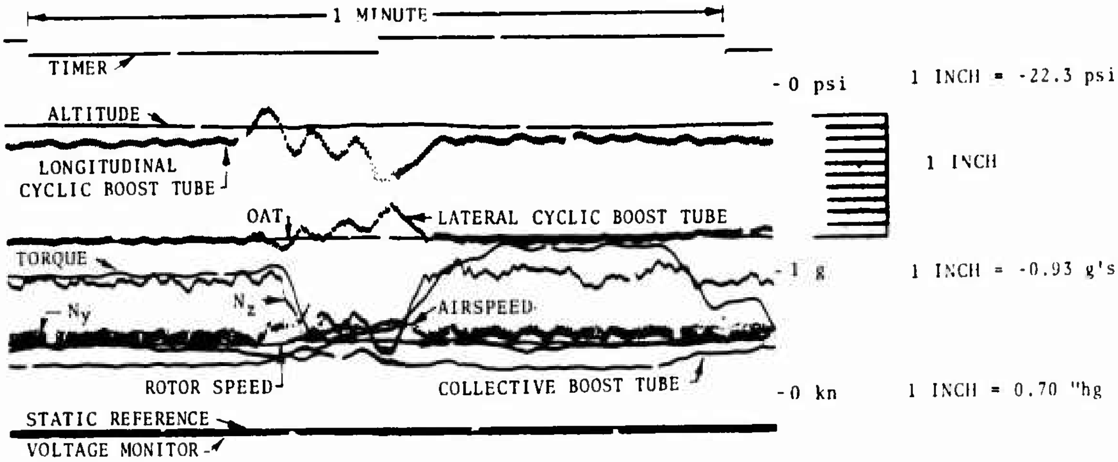
d) Steady State



e) Composite

Figure 31 - Concluded.

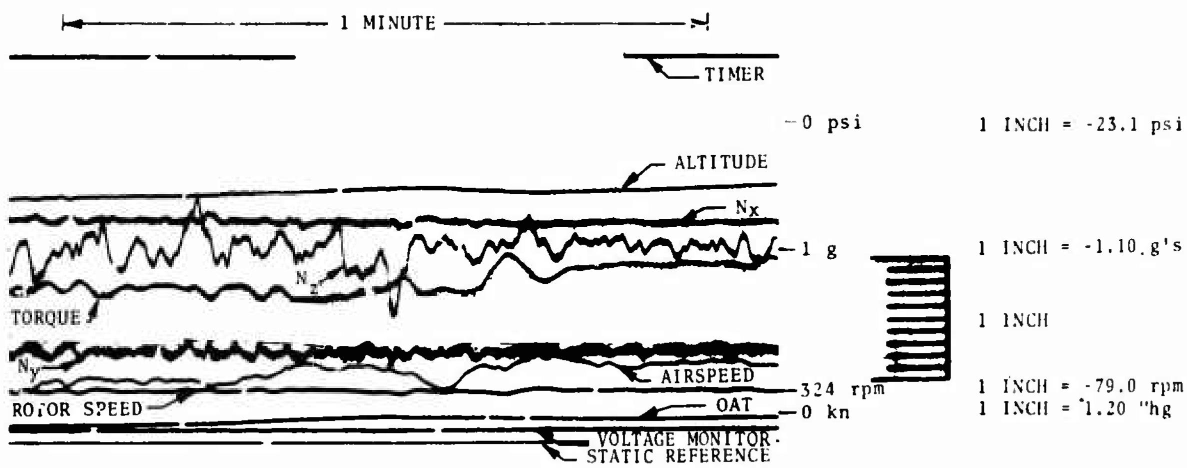
Oscillogram segments of the maximum and minimum maneuver-induced n_z peaks are presented in Figure 32. Coincident parameter values are presented for each of these maneuvers.



N_z = 1.57 g's
Rotor speed = 324 rpm
V_i 89 kn
Density altitude = 1974 ft

Gross weight = 8164 lb
μ = 0.1845
C_T/σ = 0.0654
Climb rate = -658 ft/min
Outside air temperature = 31.4°F
Engine torque = 43.9 psi

a) Maximum Maneuver-Induced Normal Load Factors



N_z = 0.53 g's
Rotor speed = 321 rpm
V_i = 85 kn
Density altitude = 36 ft

Gross weight = 7870 lb
μ = 0.1794
C_T/σ = 0.0607
Climb rate = -244 ft/min
Outside air temperature = -29.1°F
Engine torque = 32.6 psi

b) Minimum Maneuver-Induced Normal Load Factors

Figure 32. Oscillograms Showing Maneuver-Induced Maximum and Minimum Incremental Normal Load Factors.

Figures 33 and 34 compare the cumulative positive and negative normal load factor curves for the Alaskan UH-1H data with those for the SEA UH-1H data to determine similarities during maneuvering flight. As discussed above, these curves were constructed by cumulatively summing the occurrences of normal acceleration peaks, starting at the largest positive or negative peak, and then converting the values of these occurrences to cumulative normal load factors per 100 hours. Figure 33 compares the positive normal load factors for the Alaskan UH-1H data with those for the SEA UH-1H data. Although the normal load factors have a slightly higher frequency in the Alaskan data, they have a slightly greater magnitude in the SEA data. In contrast, Figure 34 for the negative normal load factors shows that the normal load factors for the SEA data have a much greater magnitude than those for the Alaskan data; but up to 0.4 Δn_z, the factors for the two sets of data closely agree in frequency and magnitude. The higher incidence of gust-induced normal load factors in the Alaskan data was due to the high wind velocities in the mountain passes of the Fort Greely area.

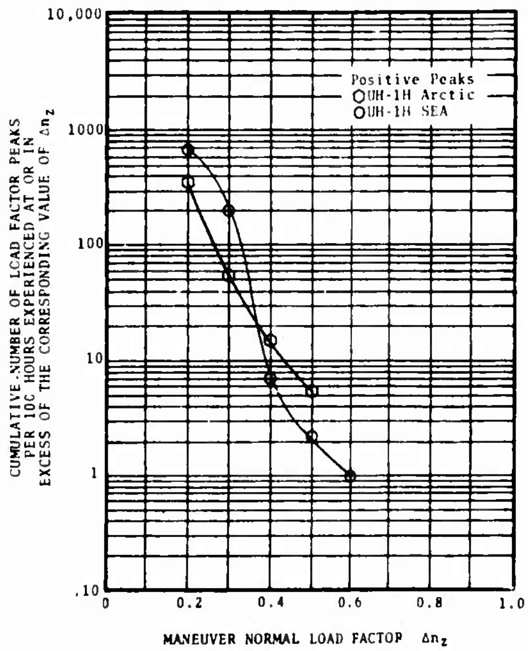


Figure 33. Cumulative Maneuver-Induced Positive Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Previous SEA UH-1H Data.

Throughout the entire range of positive and negative normal load factors, the Alaskan UH-1H helicopters experienced more gust-induced loads but less maneuver-induced loads than the SEA UH-1H helicopters.

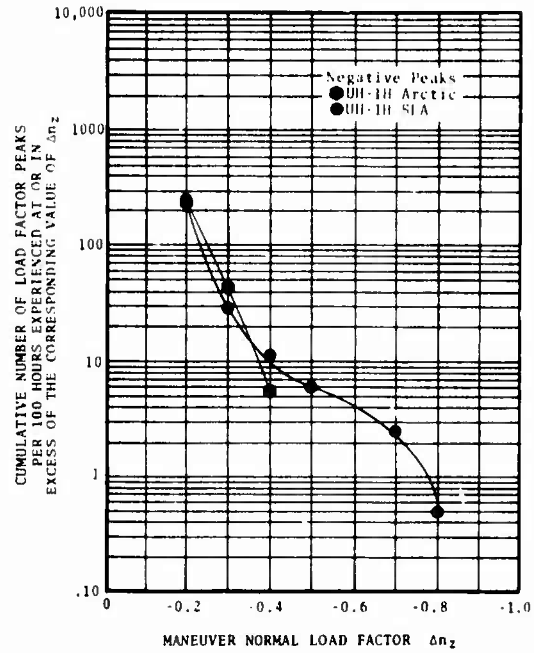


Figure 34.

Cumulative Maneuver-Induced Negative Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Previous SEA UH-1H Data.

Figure 35 compares the cumulative maneuver-induced normal load factor frequency distributions of the current UH-1H data with the $\pm 1\sigma$ scatterband curves derived in Reference 9 for similar data for all turbine-powered helicopters. As apparent, both distributions are within these scatterbands.

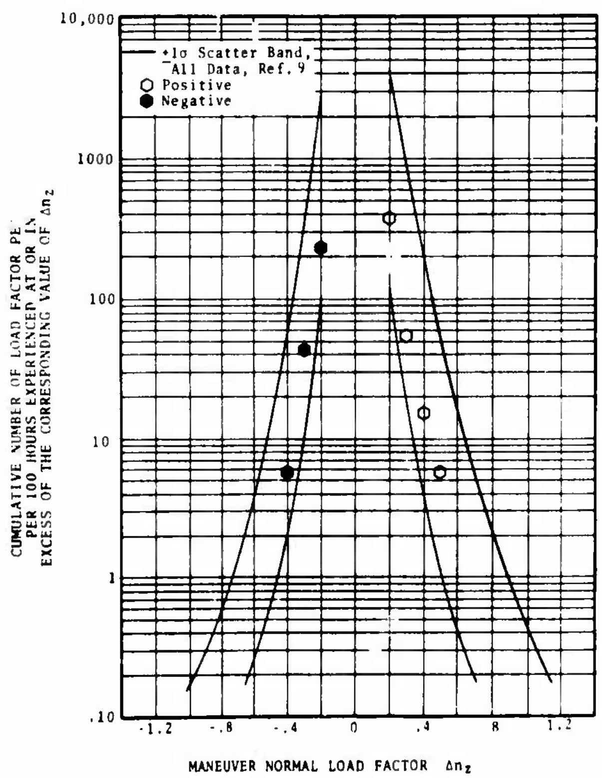
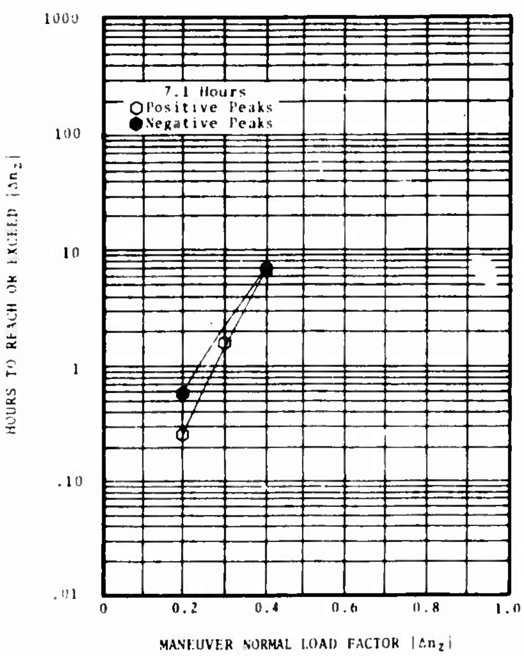


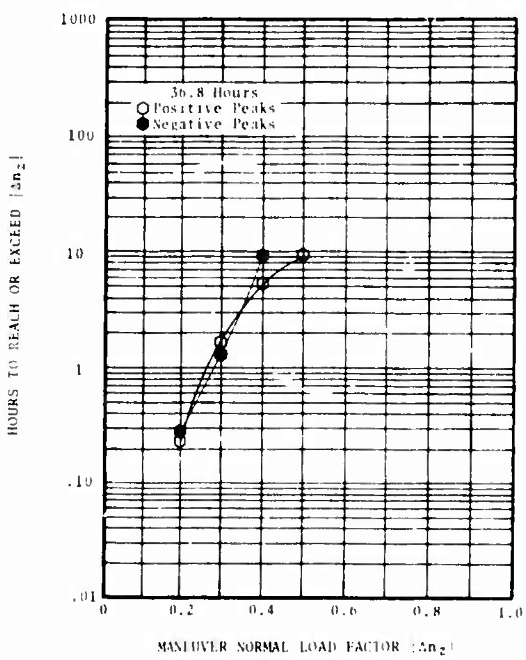
Figure 35.

Cumulative Maneuver-Induced Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Spectra Representing All Other Turbine-Powered Helicopter Data.

With a breakdown by gross weight ranges, Figure 36 presents exceedance curves of maneuver-induced normal load factors for the current UH-1H data. The rate of positive normal load factor occurrences or its inverse, the hours to reach or exceed a given Δn_z, was similar for the gross weight ranges of 6000 to 7000, 7000 to 8000, and 8000 to 9000 pounds. Within the 9,000- to 10,000 pound range, positive normal load factors occurred less often than in the other weight ranges and did not exceed 0.3g. In contrast, the range of negative Δn_z's decreased as the gross weight increased. The rate of negative normal load factor occurrences was practically the same for the weight ranges of 6000 to 7000, 7000 to 8000, and 8000 to 9000 pounds. Within the weight range of 9,000 to 10,000 pounds, the negative load factors occurred less often than in the other weight ranges and did not exceed 0.3g.

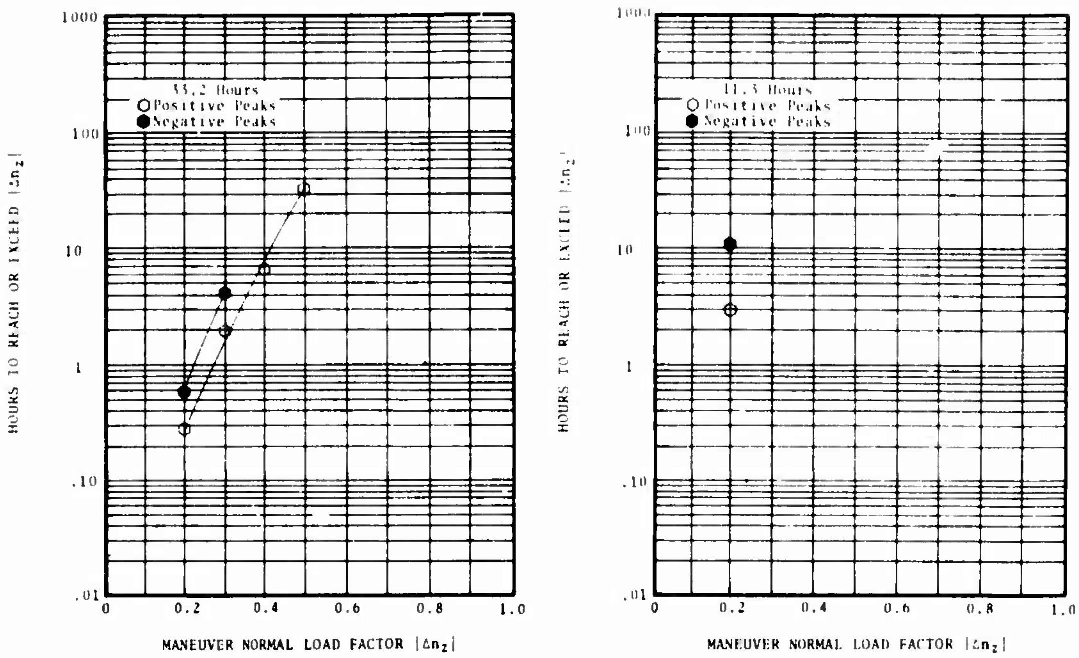


a) 6000-7000 Lb



b) 7000-8000 Lb

Figure 36. Exceedance Curves for Maneuver-Induced Incremental Normal Load Factors by Gross Weight Range.



c) 8000-9000 Lb   d) 9000-10000 Lb

Figure 36 - Concluded.

The cumulative normal load factor frequency distribution by airspeed for the current UH-1H data is presented in Figure 37. The frequency of normal load factors is expressed as the cumulative number of gust- and maneuver-induced normal load factors per 100 hours experienced at or below the corresponding airspeed level expressed in percentage of V_{ne}. As indicated in this figure, for all airspeed ranges, the lower magnitude incremental normal load factors were more frequent than the higher magnitude peaks and the positive peaks and the negative peaks of a given magnitude above 0.3g were similar in number. Further, both the positive and the negative load factors occurred most frequently in the V_{ne} range of 62 to 83 percent.

Figure 38 compares the cumulative normal load factor frequency distribution by airspeed for the Alaskan UH-1H data with that for the SEA UH-1H data. The two distributions are quite similar for the various magnitudes of normal load factor except for Δn_z's corresponding to 0.3g and 0.4g. In these two ranges, the positive peak occurrences per 100 hours of flight for the SEA UH-1H helicopters were distinctly greater than those for the Alaskan operations.

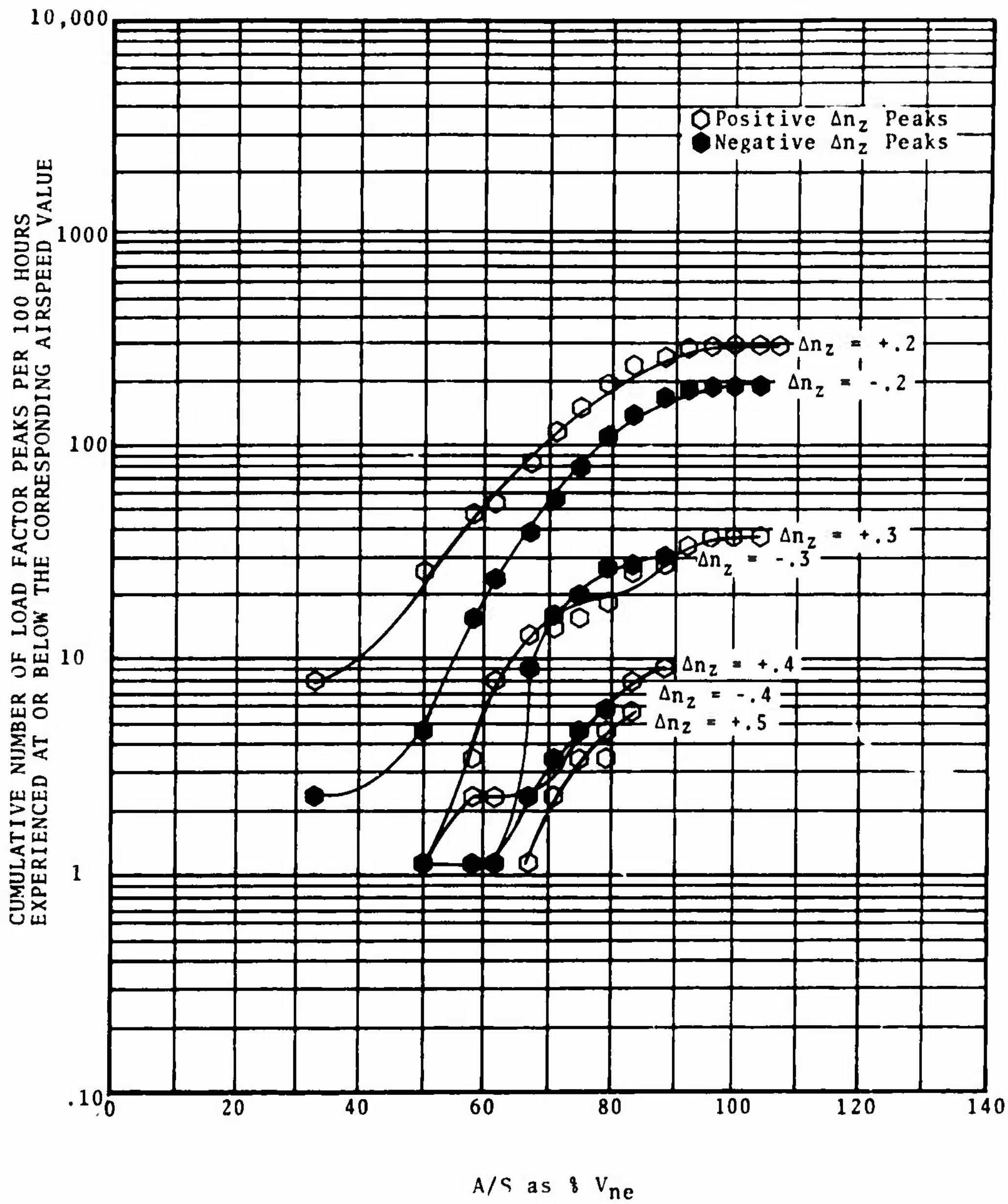
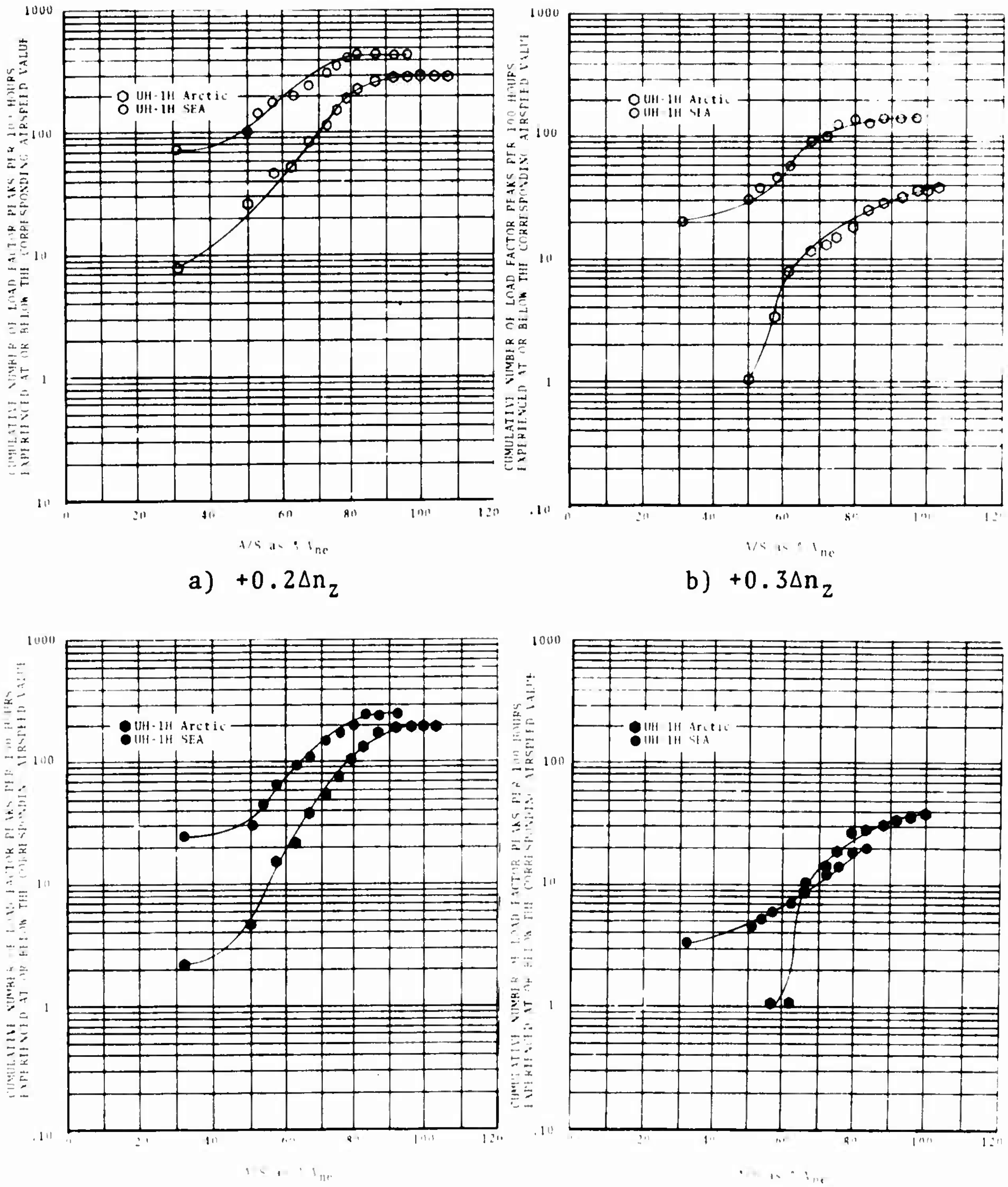


Figure 37. Composite Cumulative Normal Load Factor Frequency Distribution by Airspeed for Current Alaskan UH-1H Data.



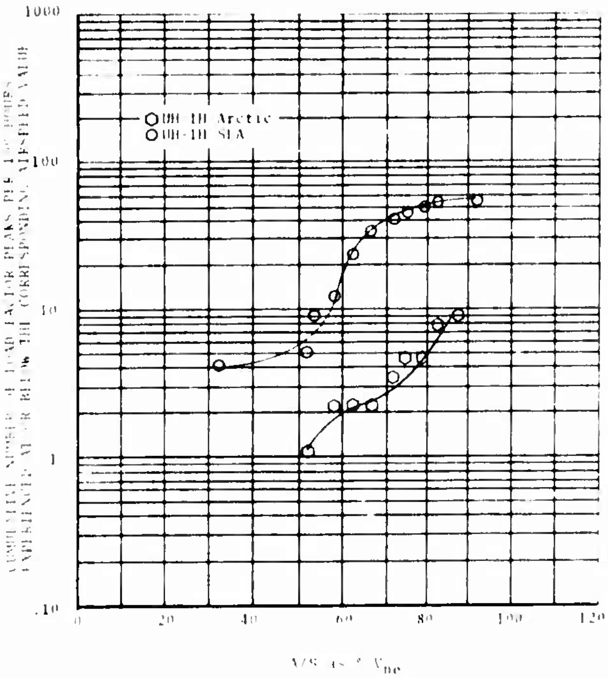
a) $+0.2\Delta n_z$

b) $+0.3\Delta n_z$

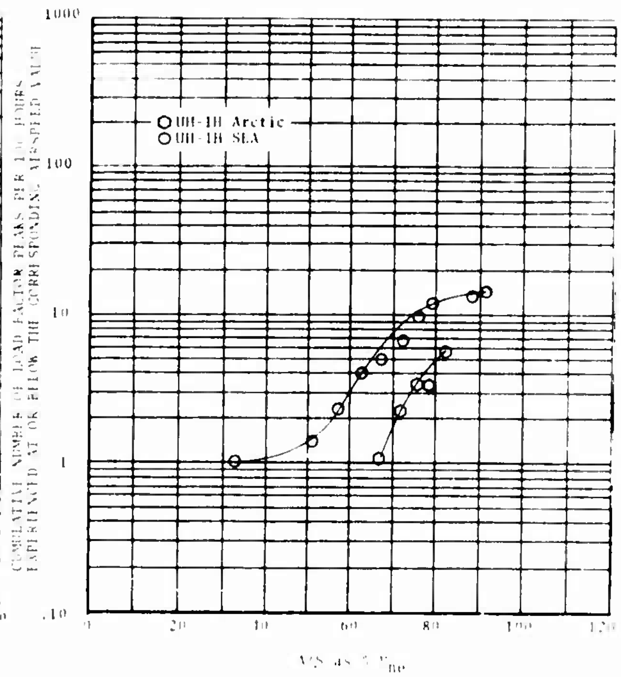
c) $-0.2\Delta n_z$

d) $-0.3\Delta n_z$

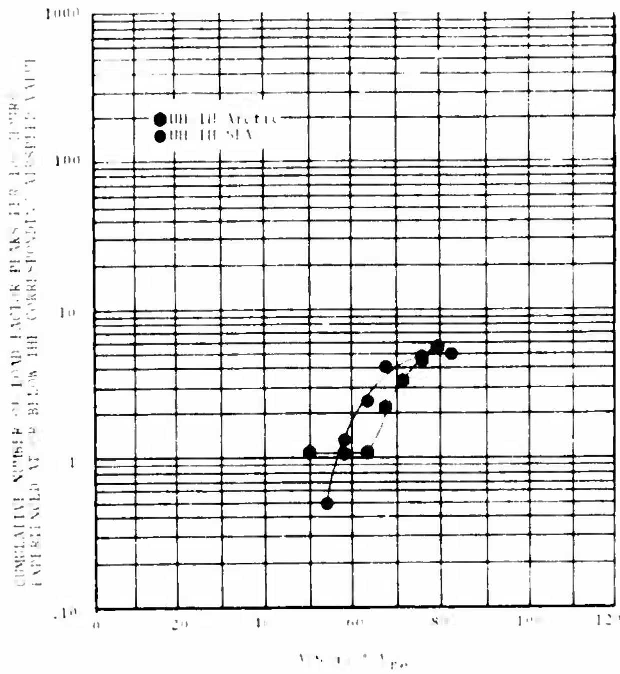
Figure 38. Composite Cumulative Normal Load Factor Frequency Distribution for Current Alaskan UH-1H Data Compared With That for Previous SEA UH-1H Data.



e) $+0.4\Delta n_z$



f) $+0.5\Delta n_z$



g) $-0.4\Delta n_z$

Figure 38 - Concluded.

The normal load factor data discussed above are listed in Tables LV through LVIII. In addition to the normal load factor data, longitudinal and lateral load factor, n_x and n_y, data are presented in Tables LIX through LXIV of Appendix I. The frequency of gust n_z's in the coincident ranges of n_z and μ and in the coincident ranges of n_z and airspeed are presented in Tables LV and LVI, respectively. For the foregoing data, Table LV has mission segment, altitude, and C_T/σ breakdowns; and Table LVI has weight, altitude, and mission segment breakdowns. Maneuver n_z peaks are presented similarly in Tables LVII and LVIII.

Tables LIX, LX, and LXI present n_x peaks in n_x versus airspeed ranges by weight, versus airspeed ranges by altitude, and versus longitudinal cyclic boost tube load ranges by mission segment, respectively. Tables LXII, LXIII, and LXIV present n_y frequencies in n_y versus airspeed ranges by weight, versus airspeed ranges by altitude, and versus lateral cyclic boost tube load ranges by mission segment, respectively. Tables LXV through LXX present n_x, n_y, and n_z frequencies in the coincident ranges of two of these parameters in various combinations.

Boost Tube Load and Other Parameters

The axial mean load of the longitudinal, lateral, and collective tubes were measured and recorded. These loads were recorded to continue the formulation of a data base for the future analysis of control forces to determine whether these forces may be used as an indicator of fatigue damage.

As discussed in the Instrumentation section, the three control boost tubes were strain-gaged to record axial loads experienced by the tubes. Because of the relatively high frequency of the boost tube loads and the low frequency response of the oscillograph recording system, the strain gage signals were filtered so that only the mean strain value of each boost tube was recorded.

Because of the larger shifts in the mean load experienced by the boost tubes in the cold environment, the normal values used in processing the data in the transient mission segments were the values derived from the loads occurring during the appropriate hover condition. Consequently, the data presented in Tables XLVIII through LIV represent the delta boost tube loads which occurred above or below the hover condition. Therefore, no graphical presentations of the boost tube loads have been included.

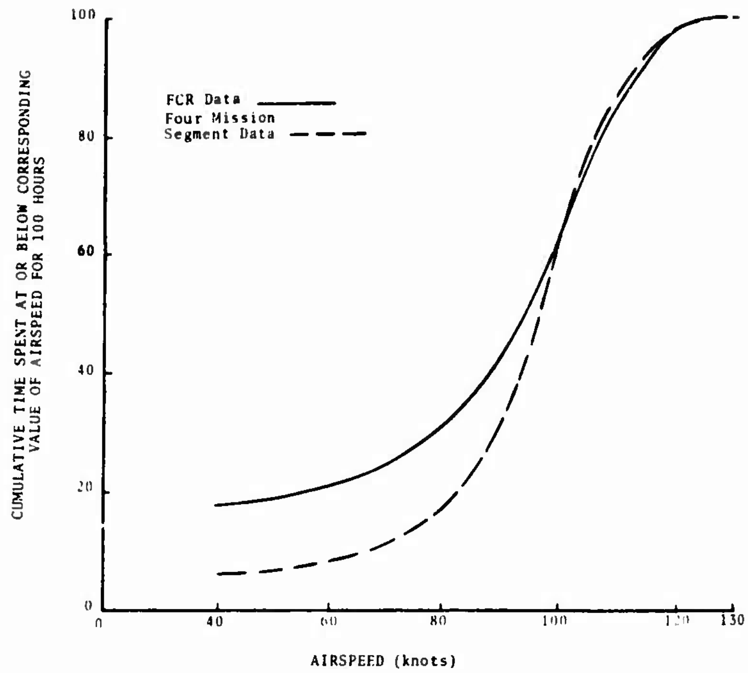
By using the procedures discussed in the Data Definitions section, the digitized n_z peaks for the UH-1H were converted into equivalent normal load factors. These data are presented in Tables LXXI and LXXII.

Tables XLV, LV, and LVII present the data for the C_T/σ and μ parameters which were derived by the procedures discussed in the Data Definition section.

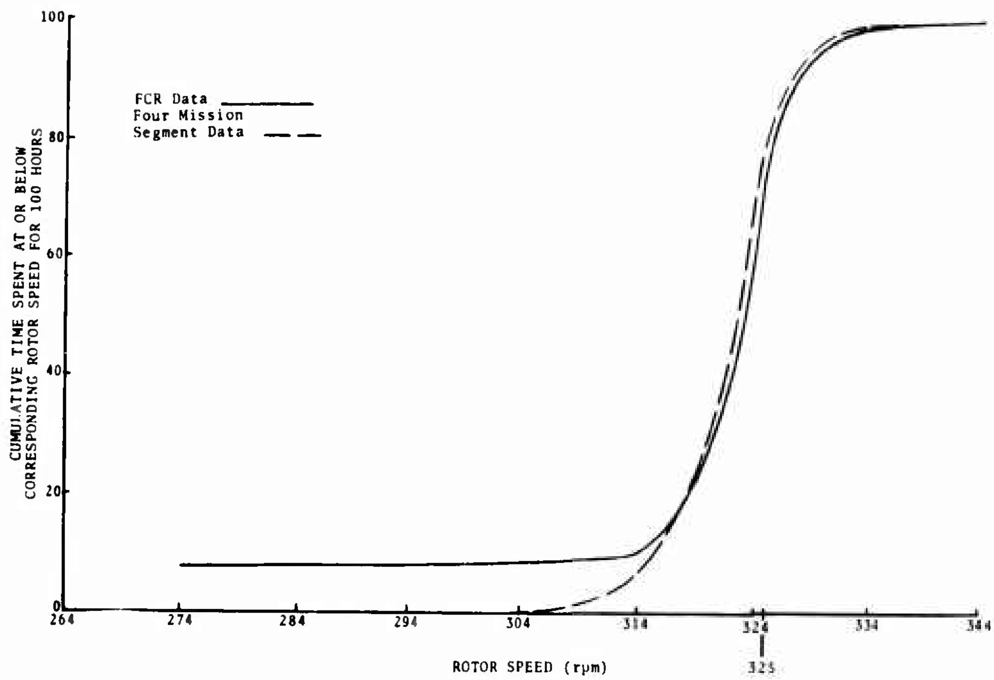
FCR DATA PRESENTATION

The following presentation of the 36 hours processed by the FCR technique is divided into two basic categories of mission segments and flight conditions. The mission segment section will discuss the seven segments and the data describing their occurrence. The second section will present the data describing the 20 of the 24 flight conditions observed during this operational survey.

Except for the cumulative frequency distributions of airspeed, rotor speed, gross weight, engine torque, density altitude, rate of climb, gust normal load factor, and maneuver normal load factor presented in Figure 39, the FCR and the Four Mission Segment data are not directly compared. These various distributions are presented to show that the small sample of 36 hours is reasonably representative of the 88 hours of Four Mission Segment data. In most cases, the curves are very similar; however, for the FCR data, more time was spent at the very low ranges of airspeed and rotor speed because of the inclusion of rotor starts and stops and ground operation. One other point of interest concerns the processing of gust and maneuver n_z peaks. During the FCR processing, a number of peaks identified as maneuver-induced during the Four Mission Segment processing were changed to gust-induced peaks. These changes were based on the lack of related flight conditions during the occurrence of the n_z peak.

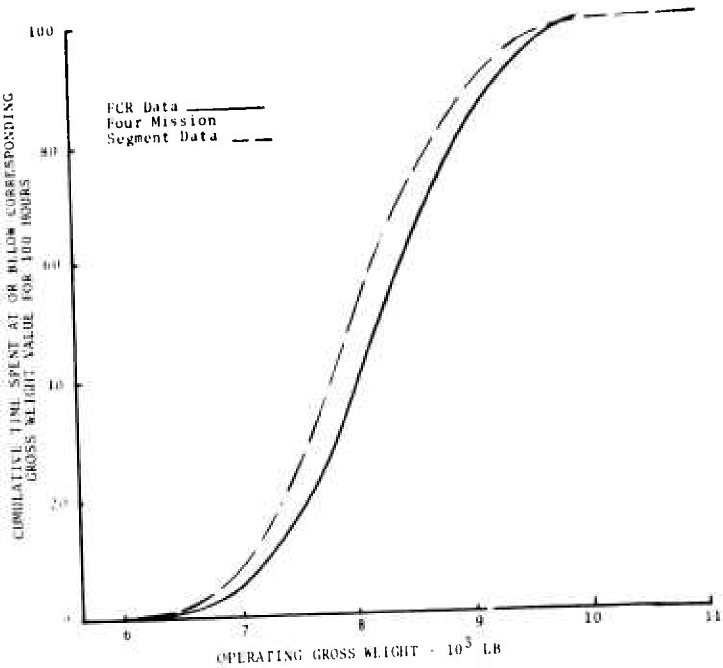


a) Cumulative Frequency Distribution for Airspeed.

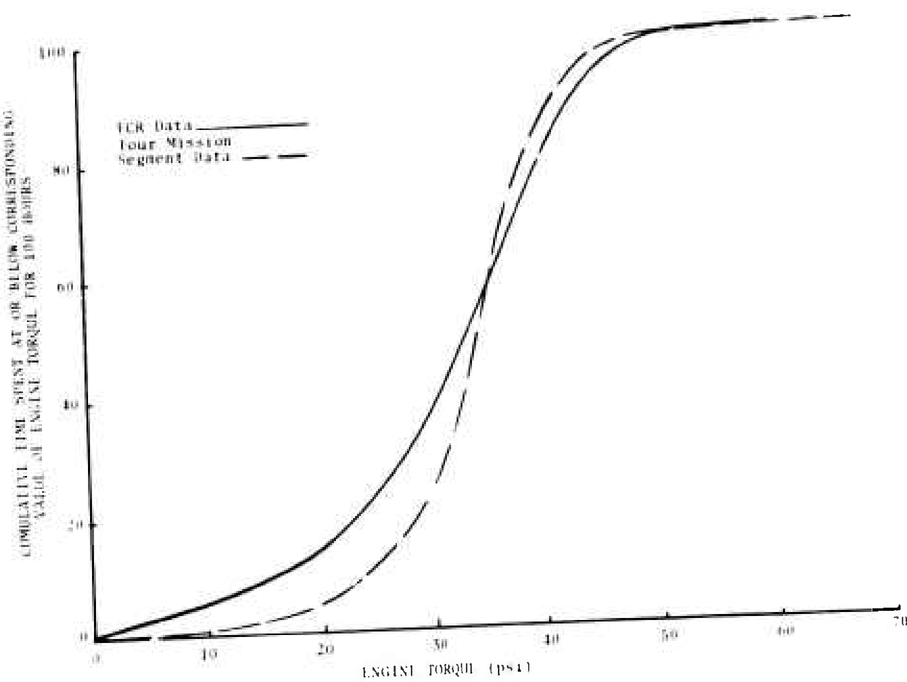


b) Cumulative Frequency Distribution for Rotor Speed.

Figure 39. Comparison of Four Mission Segment Data With FCR Data for Various Parameters.

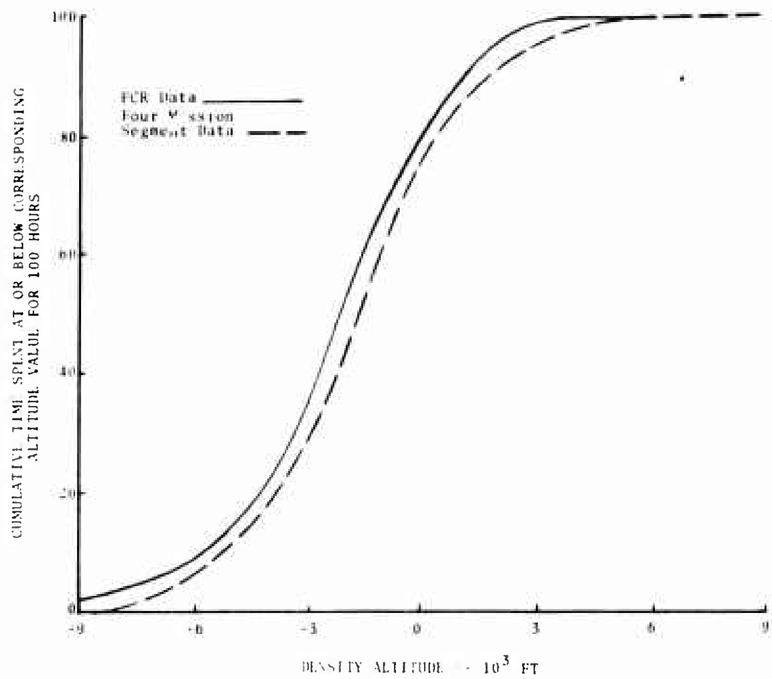


c) Cumulative Frequency Distribution for Operating Gross Weight.



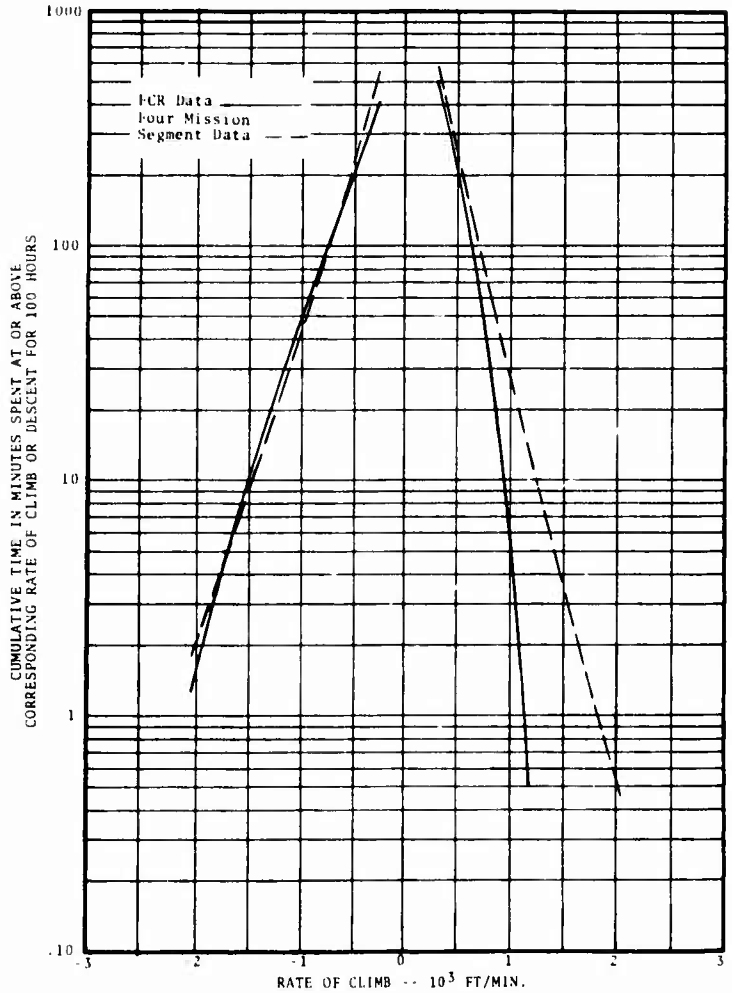
d) Cumulative Frequency Distribution for Engine Torque.

Figure 39 - Continued.



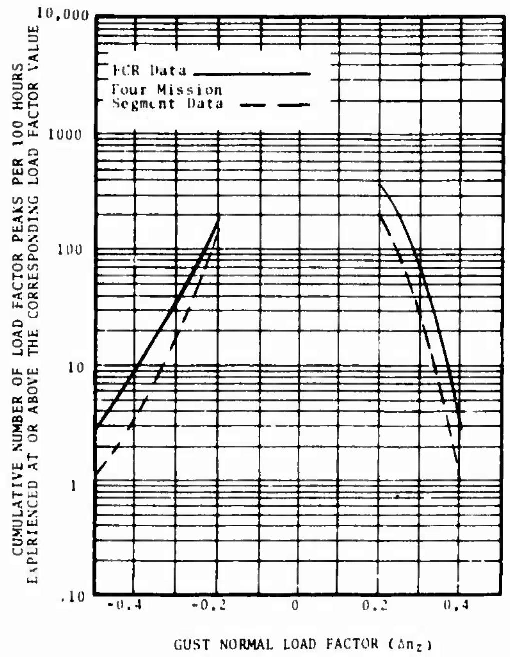
e) Cumulative Frequency Distribution for Density Altitude.

Figure 39 - Continued.

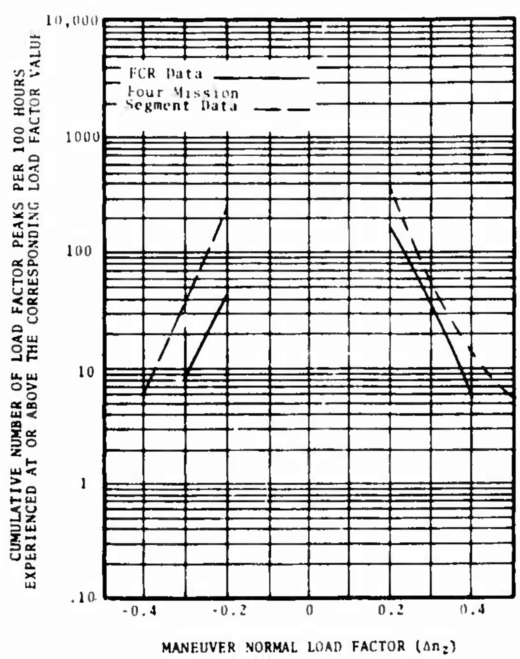


f) Cumulative Frequency Distribution for Rate of Climb.

Figure 39 - Continued.



g) Cumulative Gust-Induced Normal Load Factor Distribution.



h) Cumulative Maneuver-Induced Normal Load Factor Distribution.

Figure 39 - Concluded.

Mission Segments

In the following paragraphs, each of the seven mission segments is discussed in detail. Figure 40 presents a histogram of the percentage of time spent in each of the segments.

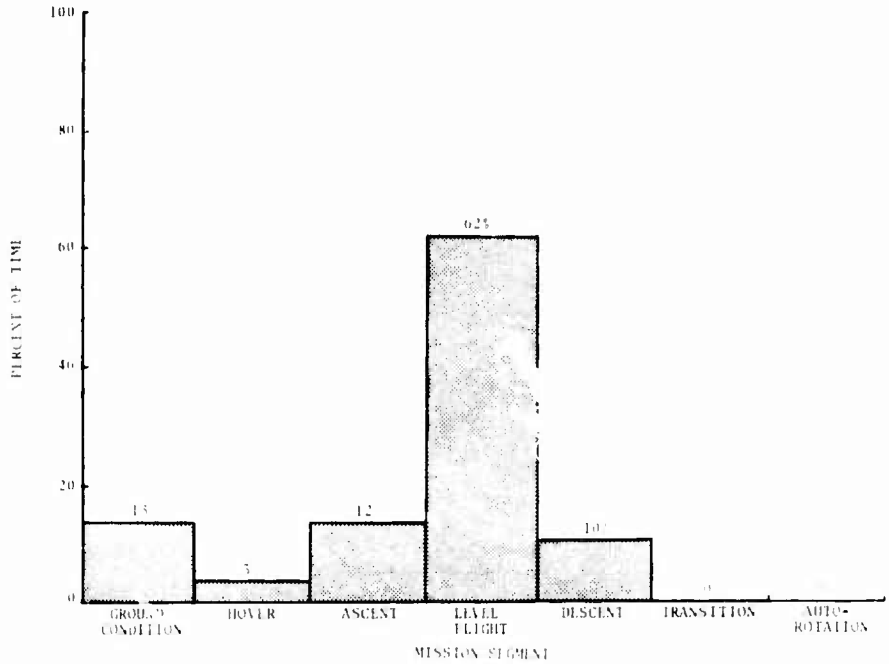


Figure 40. Percentage of Time Spent in FCR Mission Segments.

Ground Operation

Within the ground operation mission segment, three types of conditions were differentiated: ground taxi, steady state, and transient. Ground taxi occurred 16 times and lasted an average of 33 seconds. This ground operating condition is valid for the UH-1H helicopter since the surveyed helicopters were equipped with skis. Steady state occurred 154 times and lasted 83 seconds on the average. The transient conditions, during which engine torque varied rapidly, occurred 201 times and lasted an average of 18 seconds. At least one transient condition occurred after each rotor start and before each rotor stop; some of the other transients occurred during the ground operation between flights. These data are presented as histograms in Figure 41 and are listed in Tables LXXIV, LXXXIII, LXXXVII, XCIII, XCIV, XCVII, CIX, and CXIII of Appendix II.

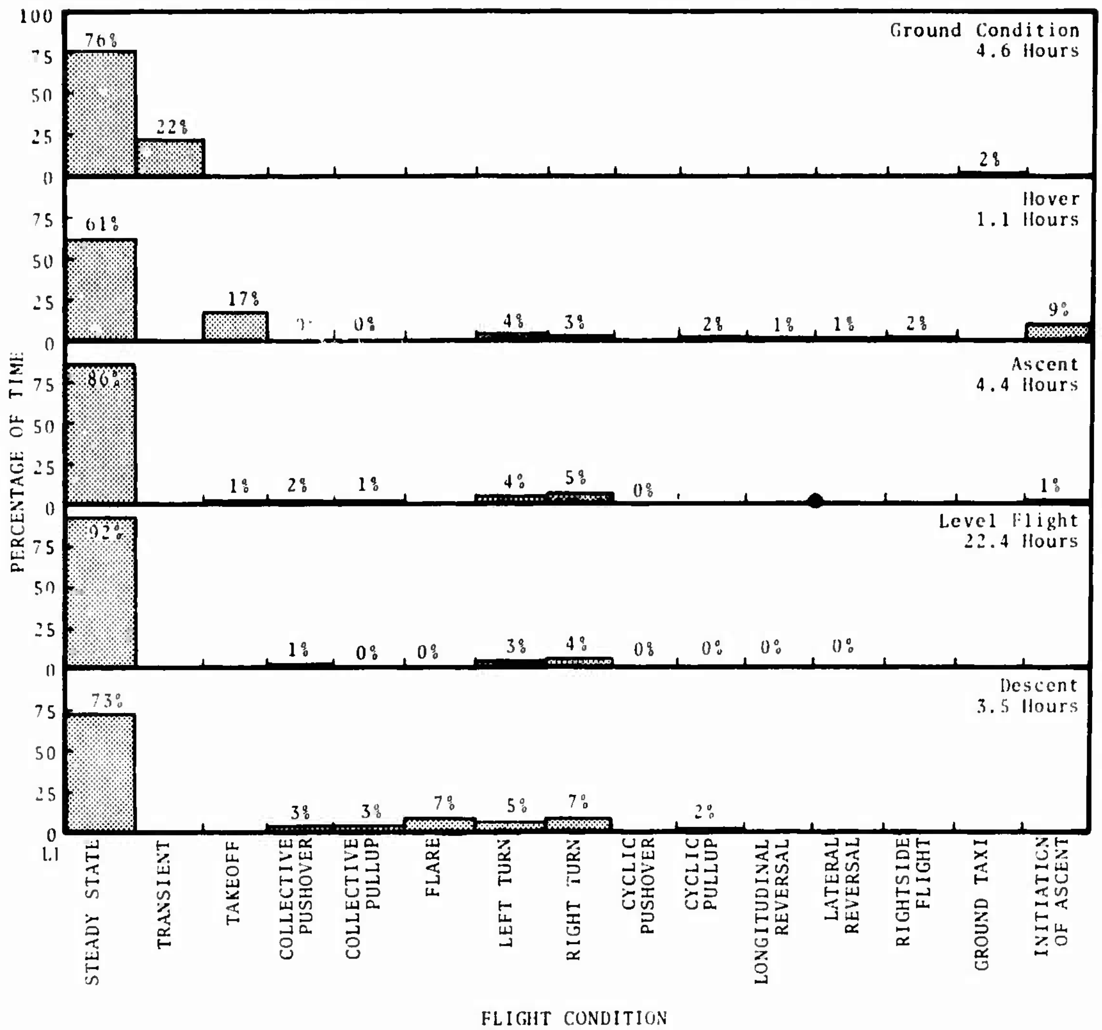


Figure 41. Percentage of Time Spent in Flight Conditions by FCR Mission Segment.

Hover

Within the hover mission segment, eight distinct types of maneuvers were observed. These maneuvers may be categorized into three board classes: change in mission segment, gust-induced, and nongust-induced. The first category consists of takeoff and initiation of ascent. Takeoffs to hover, all initiated from ground operation, occurred 46 times and lasted for an average of 14.6 seconds. Initiation of ascent was the maneuver which began in a hover and resulted in an ascending climb. Consisting of the simultaneous application of forward cyclic and increased collective control movements, the initiation of ascent occurred 37 times and lasted for an average of

10 seconds. The gust-induced maneuvers - collective pushovers and pull-ups, cyclic pull-ups, and longitudinal and rudder reversals - were maneuvers which opposed the effects of wind gusts during the hovers. Their frequency of occurrence and average duration are shown in Table V. The nongust-induced maneuvers consisted of left and right turns and right sideward flight. Seven left turns, six right turns, and two right sideward flights occurred with average durations of 20, 22, and 34 seconds, respectively. These data are presented as histograms in Figure 41 and are listed in Tables LXXIII, LXXV through LXXXI, LXXXIV through LXXXVI, XCV, XCVI, CI through CIV, CVI, CVII, and CIX through CXII of Appendix II.

TABLE V. GUST-INDUCED FLIGHT CONDITION IN HOVER

Flight Condition	Occurrences	Ave. Duration (sec)
Collective Pushover	1	5.4
Collective Pull-up	1	5.4
Cyclic Pull-up	8	11.6
Longitudinal Reversal	4	8.7
Lateral Reversal	2	7.2

Ascent

Within the ascent mission segment, seven types of maneuvers occurred besides the steady-state condition. These maneuvers or flight conditions may be divided into three classes of maneuvers: those which would initiate or increase the rate of climb, those which would decrease or stop the rate of climb, and those which would not affect the rate of climb.

The first category consisted of takeoff, initiation of ascent, and collective pull-up flight conditions. Takeoffs to the ascent mission segment, all initiated from ground operations, occurred 20 times and lasted an average of 10.5 seconds. Initiation of ascent was the maneuver which followed the takeoff flight condition and resulted in an ascending climb. Consisting of the simultaneous application of forward cyclic and increased collective control movements, the initiation of ascent occurred 17 times and lasted an average of 11 seconds. The remaining three maneuvers following the takeoff were climbing turns. Seven collective pull-ups, each lasting approximately 5 seconds, were performed during the Ascent mission segment; however, all of these maneuvers were mild since no n_z peaks outside the editing threshold were observed.

The second category consisted of collective and cyclic pushovers. Of the maneuvers recorded in this category, 31 were collective pushovers which had an average duration of 16 seconds, and one was a cyclic pushover which lasted 10 seconds. All of these pushovers were mild. Only one collective pushover generated a normal load factor outside the threshold; the corresponding acceleration peak reached the range of 0.7g to 0.8g and lasted 1.2 seconds. This collective pushover also caused a positive normal load factor between 1.2g and 1.3g during the recovery.

The third category consisted of left and right turns during a climb. Of the time in the ascent mission segment, 4 percent was spent in performing 20 left turns which had a 28-second average duration, and 5 percent was spent in performing 30 right turns which had a 29-second average duration. Forty percent of the left turns and 27 percent of the right turns generated normal acceleration peaks outside the smaller editing threshold of 0.9g to 1.1g. The maximum n_z peak for the left turns was between 1.2g and 1.3g, and that for right turns was between 1.3g and 1.4g.

Approximately 86 percent of the ascent mission segment was spent in the steady-state flight condition. With a breakdown by gross weight, Table VI summarizes the maximum and minimum values of several selected parameters. These data, as well as the data discussed above, were extracted from Tables LXXIII, LXXV through LXXX, LXXXIII, LXXXVIII, XCV, XCVIII, CI through CVII, CIX, CXI, and CXII of Appendix II.

TABLE VI. SUMMARY OF SELECTED PARAMETERS DURING STEADY-STATE OPERATION IN ASCENT

Gross Weight (lb)	Airspeed Range (kn)	Main Rotor Speed Range (rpm)	Main Rate of Climb (ft/min)
6000	0 to 120	314 to 334	900
7000	0 to 110	294 to 334	900
8000	0 to 105	304 to 334	900
9000	0 to 105	314 to 324	900

Level Flight

Within the level flight mission segment, ten distinct types of maneuvers were observed. These maneuvers may be categorized into three broad classes: change in mission segment, gust-induced, and nongust-induced.

The first category consisted of six maneuvers which caused a change in mission segment by initiating an ascent or a descent. An ascent was initiated by a collective or cyclic pull-up. Such ascents were caused by 34 collective pull-ups which lasted 10 seconds on the average and 15 cyclic pull-ups which lasted 13 seconds on the average. Of the n_z peaks from the collective pull-ups, the maximum was between 1.3g and 1.4g, its duration above the 1.1g threshold was 1.2 seconds, and the corresponding pull-up lasted 10 seconds. Of the n_z peaks from the cyclic pull-ups, two were between 1.4g and 1.5g and lasted for a total of 24 seconds, of which 12.4 seconds was spent above the load factor threshold. A descent from level flight was initiated by a collective or cyclic pushover or by a low-altitude flare. Such descents were caused by 84 collective pushovers which had a 9-second average duration, 6 cyclic pushovers which had an 11-second average duration, and two low-altitude flares which had a 12-second average duration. Of the collective pushovers, five generated n_z peaks which were between 0.6g and 0.7g and lasted for a total of 4.8 seconds. Of the cyclic pushovers, all were mild, none generating n_z peaks outside the threshold. The two low-altitude flares, which were not classified in the descent mission segment because the altitude did not change perceptibly, did not generate n_z peaks outside the threshold. In addition to the above maneuvers which caused changes in mission segment from level flight to ascent, descent, or ground operations, 106 maneuvers, identified as mission segment variations, occurred. Since these maneuvers were very mild pushovers or pull-ups where the control movement was generally less than 10 percent of full travel and no n_z peaks exceeded the threshold, the time of these maneuvers was placed in the steady-state category during the data processing.

The second category, gust-induced maneuvers, consisted of longitudinal and lateral control reversals. As indicated in Table III, these maneuvers were caused by control deflections that were more than 10 percent of the full-control deflection and were not related to another flight condition; in general, the n_z and airspeed traces both indicated gusty conditions. Of these maneuvers, four were caused by longitudinal control reversals and three by lateral control reversals, both reversals had an 8-second average duration. All of the reversals were mild, none generating n_z peaks outside the editing threshold.

The third category, nongust-induced maneuvers, consisted of left and right turns which occurred during level flight. Of the time in the level-flight segment, 3 percent was spent in performing 71 left turns which lasted 29 seconds on the average, and 4 percent

was spent in performing 111 right turns which lasted 27 seconds on the average. Twenty-one percent of the left turns and 35 percent of the right turns generated normal accelerations outside the smaller editing threshold of 0.9g to 1.1g. The maximum n_z peak for the left turn was between 1.2g and 1.3g, and the maximum for right turns was between 1.3g and 1.4g.

Approximately 92 percent of the time in the level-flight mission segment was spent in the steady-state flight condition. With a breakdown by gross weight, Table VII summarizes the maximum and minimum values of several selected parameters. These data, as well as the data discussed above, were extracted from Tables LXXVI through LXXXIII, LXXXV, LXXXVI, LXXXVIII, XCV, XCVI, XCVIII through C, CIII through CIX, and CXI of Appendix II.

TABLE VII. SUMMARY OF SELECTED PARAMETERS DURING STEADY-STATE OPERATION IN LEVEL FLIGHT

Gross Weight (lb)	Airspeed Range (kn)	Density Altitude Range (ft)	OAT Range (°F)
6000	0 to 125	-6000 to 0	-80 to 0
7000	0 to 115	-6000 to 6000	-80 to 20
8000	0 to 110	below 0 to 0	-80 to 40
9000	40 to 120	below 0 to 0	-80 to 0

Descent

Within the descent mission segment, six types of maneuvers occurred besides the steady-state operation. These maneuvers may be divided into three classes: those which would initiate or increase the rate of descent, those which would decrease or stop the rate of descent, and those which do not affect the rate of descent. The first category consisted only of collective pushover during the subject program. Such collective pushovers occurred 23 times with a 14-second average duration and accounted for 3 percent of the time in the descent mission segment.

The second category consisted of collective pull-ups, cycle pull-ups, and flares. Of these maneuvers, 38 were collective pull-ups which had a 9-second average duration and accounted for 3 percent of the segment time; 13 were cyclic pull-ups which had a 19-second average duration and accounted for 2 percent of the segment time; and 51 were flares which had an 18-second average duration and accounted for 7 percent of the segment time.

The third category included left and right turns. Of these maneuvers, 19 were left turns which lasted 33 seconds on the average, and 29 were right turns which lasted 30 seconds on the average. Twenty-six percent of the left turns and 45 percent of the right turns generated n_z peaks outside the smaller threshold between 0.9g and 1.1g. The maximum n_z peak for the left turns was between 0.7g and 0.8g, and that for right turns was between 0.5g and 0.6g.

Approximately 73 percent of the descent mission segment was spent in the steady-state flight condition. With a breakdown by gross weight, Table VIII summarizes the maximum and minimum values of several selected parameters. These data, as well as the data discussed above, were extracted from Tables LXXVI through LXXXIII, LXXXVI, LXXXVIII, and CII through CIX in Appendix II.

TABLE VIII. SUMMARY OF SELECTED PARAMETERS DURING STEADY-STATE OPERATION IN DESCENT

Gross Weight (lb)	Airspeed Range (kn)	Main Rotor Speed Range (rpm)	Max. Rate of Descent (ft/min)
6000	40 to 95	314 to 325	1500
7000	0 to 120	314 to 325	2100
8000	0 to 110	314 to 325	1200
9000	0 to 120	314 to 325	2100

Transition and Autorotation

The editing criterion, as it was finally defined, identified the transition mission segment as occurring before and after the autorotation mission segment. The entry into and the recovery from the autorotation were the only flight conditions occurring in the transition segment. Consequently, the transition mission segment should be eliminated; the entry into and the recovery from an autorotation should be classified as a flight condition within the autorotation mission segment in future programs.

Two autorotations occurred during the initial flight test program of the subject survey. Consequently, these two occurrences were not considered as representative of the arctic operation and are not discussed in the data presentation. However, for general information, an oscillogram section of one of these autorotations is presented in Figure 42. In addition, the data for these two occurrences are summarized in Tables LXXXIII, LXXXVII, XCII, and CXIII of Appendix II.

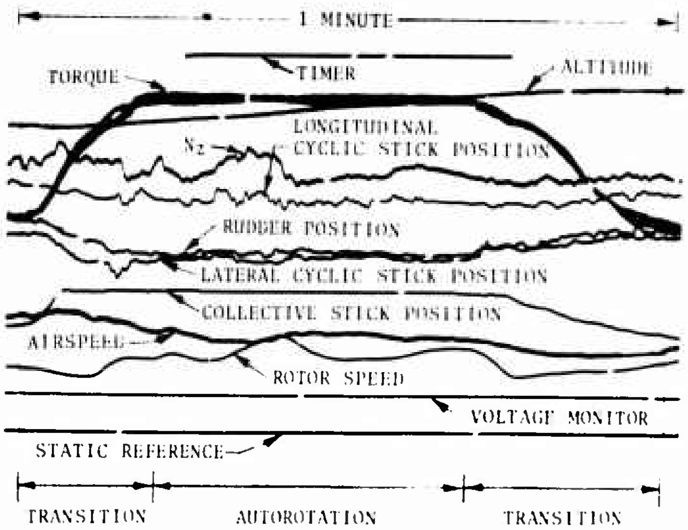


Figure 42. Oscillogram Showing Transition and Autorotation.

FLIGHT CONDITIONS

Of the 24 flight conditions defined in Table III, 20 were observed and used during the FCR data processing. These conditions are categorized as events, sustained conditions, or transient conditions. The events include the conditions of rotor start, takeoff, touchdown, rotor stop, ground taxi, mission segment variation, begins in flight, and ends in flight. The sustained flight conditions are such maneuvers as initiation of ascent, left and right turns, cyclic and collective pushovers, cyclic and collective pull-ups, flares, and steady flight. The last group of conditions, transients, includes right sideward flight, lateral reversals, and transient condition during ground operations. Each of the flight conditions will be discussed in the following paragraphs. Figure 41 summarizes the percentage of time spent in the various flight conditions by mission segment.

Rotor Starts and Stops

The rotor start flight condition was counted as an occurrence when the main rotor speed exceeded 264 rpm. Thirty-three starts, all occurring in the ground operation segment, were recorded during the 36 hours of data processed by the FCR technique. These starts were fairly evenly divided among the gross weight ranges of 7,000 pounds and higher, as presented in Figure 43.

The rotor stop condition was counted as an occurrence when the main rotor speed dropped below 264 rpm and electrical power ceased. Only 29 rotor stops were recorded during the survey. The difference of four between the number of starts and stops

was caused by jammed oscillogram magazines or magazines exhausting of paper in flight. All of the rotor stops occurred in the ground operation mission segment. As can be seen in Figure 43, the rotor stops were normally distributed among the four gross weight ranges.

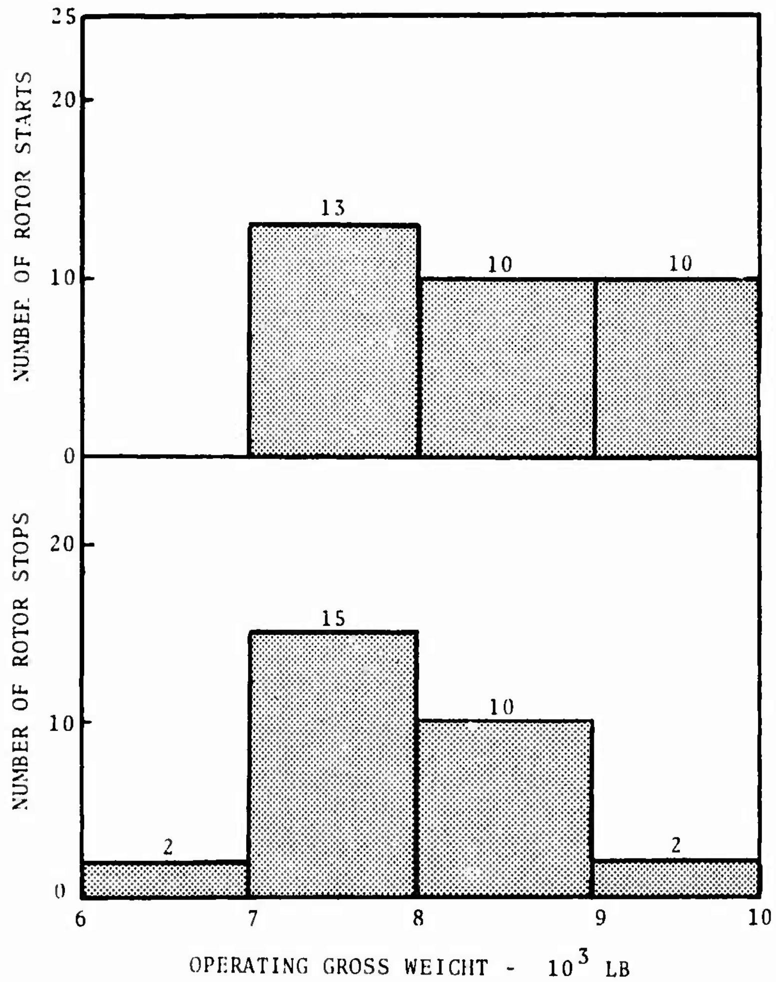


Figure 43. Occurrences of Rotor Starts and Rotor Stops by Gross Weight.

Tabular data for the rotor starts and stops are presented in Tables XCIII and XCIV of Appendix II.

Takeoffs

Takeoffs extended from the ground operation mission segment to either the hover or the ascent mission segment. For a hover, the duration of the takeoff was from the application of engine torque, through the lift-off, to the stabilization of engine

torque. Takeoffs to the ascent mission segment were timed from the application of engine torque and flight control movement (collective) until the sharp application of forward longitudinal cyclic control. At this point, a flight condition called initiation of ascent was begun. A sample segment of an oscillogram showing such a takeoff is presented in Figure 44.

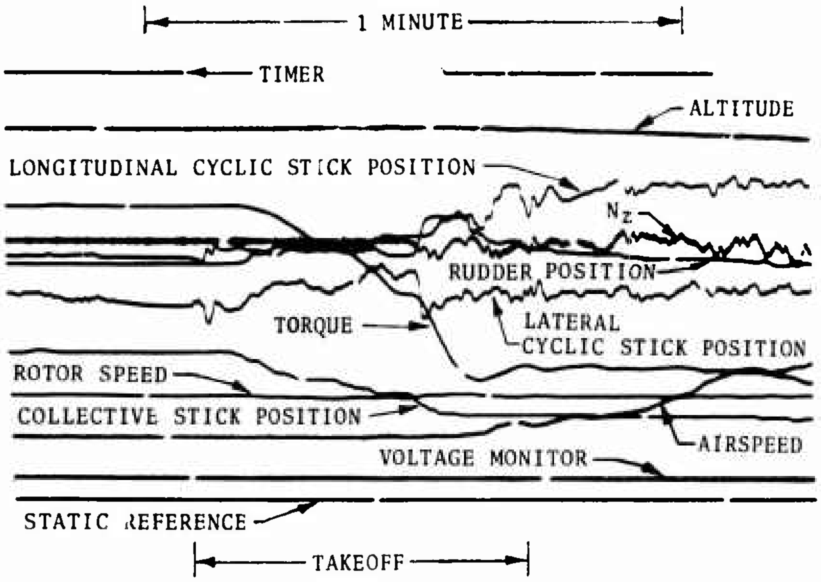


Figure 44. Oscillogram Showing Takeoff to Ascent.

Forty-six takeoffs to a hover occurred during the survey, representing 17 percent of the time spent in that mission segment. The takeoffs lasted an average of 15 seconds. The distribution of gross weight was normally divided among the gross weight ranges of 7,000 and more pounds, as shown in Figure 45. The main rotor rpm varied from 284 rpm to above 334 rpm; 20 percent of the time was spent above the 324 rpm limit. The distribution of density altitude at takeoff is presented in Figure 46. Twenty takeoffs to an ascent occurred during the survey. These conditions accounted for one percent of the time spent in the ascent mission segment and each one lasted an average of 11 seconds. Slightly more takeoffs were at gross weights below 8,000 pounds than above, as shown in Figure 47. The range in main rotor rpm for these takeoffs was considerably less than that for takeoffs to hovers, the former being only 314 to 333 rpm. Approximately 21 percent of the time was spent above the 324 rpm limit. The distribution of density altitude at takeoff is presented in Figure 48.

The data for each type of takeoff are contained in Tables LXXIII and XCV of Appendix II.

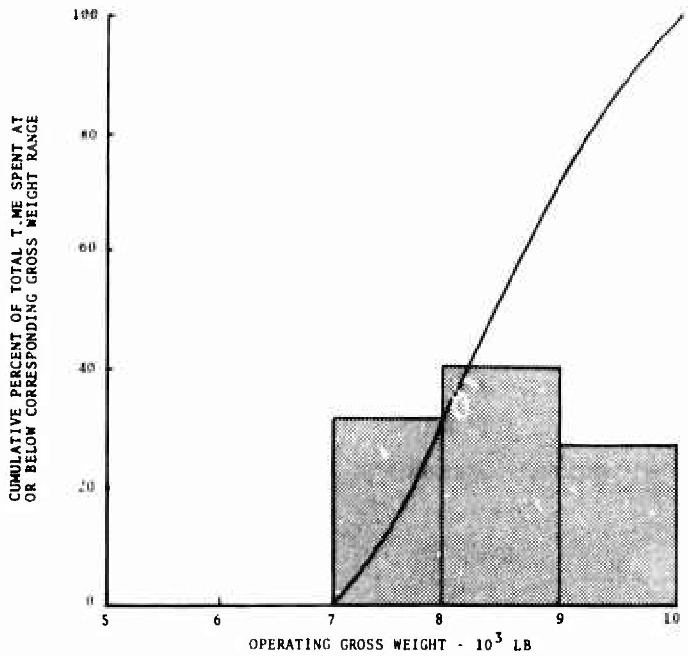


Figure 45. Cumulative Gross Weight Frequency Distribution for Takeoff to Hover.

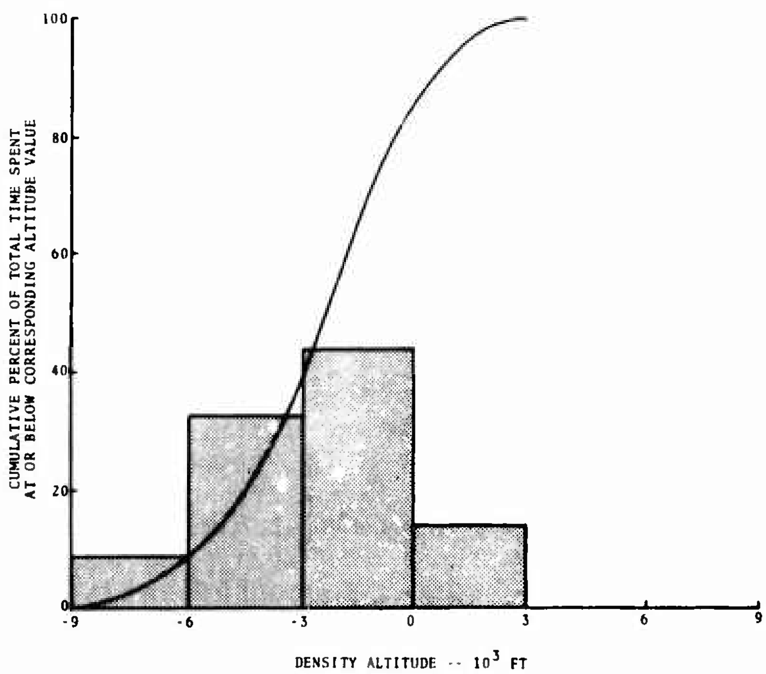


Figure 46. Cumulative Density Altitude Frequency Distribution for Takeoff to Hover.

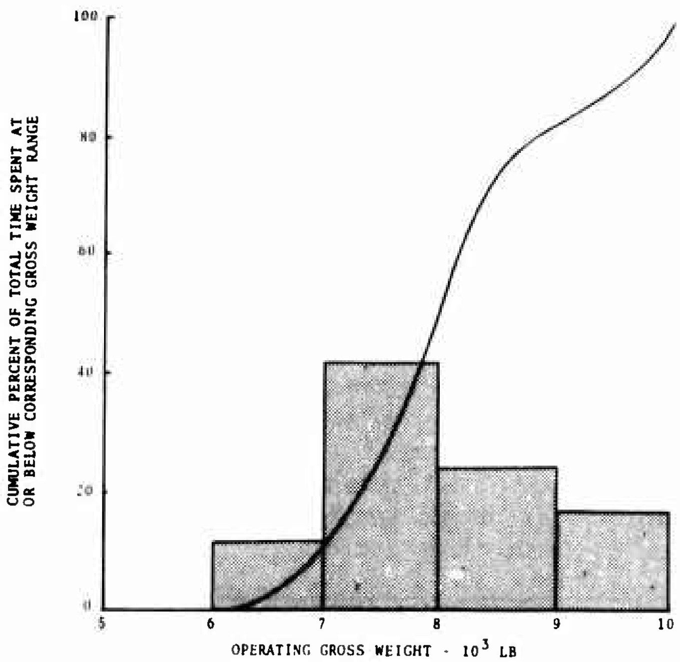


Figure 47. Cumulative Gross Weight Frequency Distribution for Takeoff to Ascent.

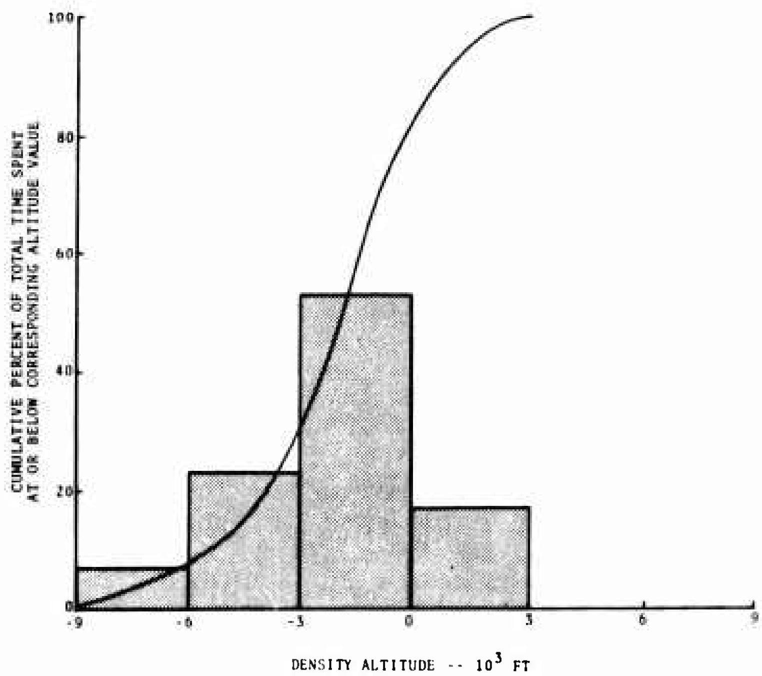


Figure 48. Cumulative Density Altitude Frequency Distribution for Takeoff to Ascent.

Touchdowns

Touchdown was the flight condition where a helicopter landed from either the descent or the hover mission segment. This flight condition was treated as an event, with no time associated with it.

Fifty touchdowns from a hover occurred during the survey. The touchdown distribution in gross weight ranges is presented in Figure 49. Two of the 50 touchdowns had short-duration n_z peaks, one of 1.2g and one of 1.3g. From the descent mission segment, 12 touchdowns occurred; the touchdown distribution in gross weight ranges is presented in Figure 49. The gross weight distribution is skewed toward the lower gross weights for touchdowns from a descent, most probably due to the desire to avoid a "hard" touchdown at high gross weights. Similarly, no n_z peaks were observed during landings from a descent.

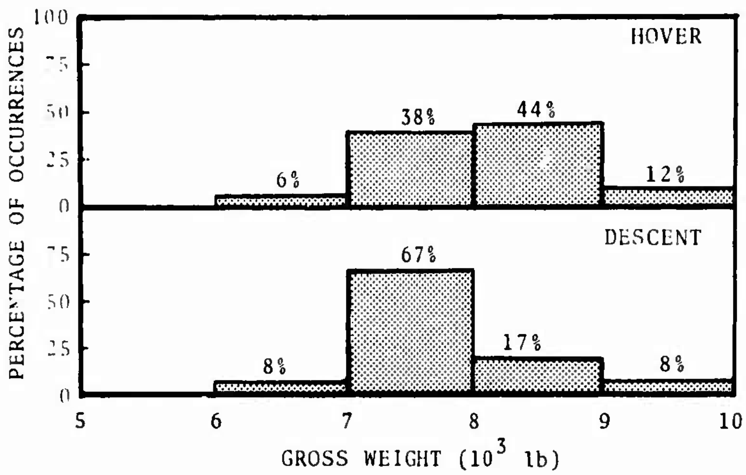


Figure 49. Percentage of Occurrences for Touchdown by Gross Weight and Mission Segment.

One touchdown occurred from a level flight mission segment; this landing occurred in the 7,000-pound gross weight range after a descent and then a level flight at an altitude very close to or at the landing altitude. The airspeed was below 40 knots. The data for each type of touchdown are contained in Tables XCII and XCVI of Appendix II.

Mission Segment Variations

Although many changes from one to another of the ascent, level flight, or descent mission segments were initiated by either a pull-up or pushover, most changes were so gradual or mild that a special flight condition, mission segment variation (MSV)

was needed. The MSV condition was normally a pushover or pull-up where only slight movement of the appropriate control could be noted and no n_z peaks were generated. During this survey, 184 MSV's occurred: 40 in ascent, 106 in level flight, and the remaining 39 in descent. Tables IX, X, and XI summarize the maximum and minimum values of several selected parameters for the MSV's occurring in ascent, level flight, and descent, respectively; they occurred in all gross weight ranges, at airspeeds below 40 knots to 119 knots, and at rotor speeds from 314 to over 334 rpm. Additional data are contained in Tables LXXXVIII and XCVIII.

TABLE IX. SUMMARY OF SELECTED PARAMETERS DURING MISSION SEGMENT VARIATIONS IN ASCENT

Gross Weight (lb)	Airspeed Range (kn)	Main Rotor Speed Range (rpm)	Max. Rate of Ascent (ft/min)
6000	90 to 110	314 to 325	300
7000	0 to 110	314 to 325	300
8000	60 to 105	314	300
9000	70 to 95	314 to 325	300

TABLE X. SUMMARY OF SELECTED PARAMETERS DURING MISSION SEGMENT VARIATIONS IN LEVEL FLIGHT

Gross Weight (lb)	Airspeed Range (kn)	Main Rotor Speed Range (rpm)	Max. Rate of Ascent (ft/min)
6000	80 to 95	314 to 325	300
7000	40 to 115	314 to 325	300
8000	60 to 115	314 to 325	300
9000	40 to 115	314 to 325	300

TABLE XI. SUMMARY OF SELECTED PARAMETERS DURING MISSION SEGMENT VARIATIONS IN DESCENT

Gross Weight (lb)	Airspeed Range (kn)	Main Rotor Speed Range (rpm)	Max. State of Descent (ft/min)
6000	80	314	-300
7000	40 to 115	314 to 325	-300
8000	70 to 115	314 to 325	-300
9000	40 to 80	314 to 325	-300

Ground Taxis

Since the helicopters surveyed during this program were equipped with skis, a flight condition called ground taxi was formulated. This condition was characterized by slightly elevated engine torque, forward cyclic control, and an active normal load factor trace not characteristic of flight.

Sixteen ground taxis were observed during the ground operation mission segment; they lasted for a total of 5.5 minutes or 2 percent of the time spent in this mission segment. The ground taxis occurred in the gross weight ranges of 7,000, 8,000, and 9,000 pounds. As shown in Figure 50, all of the time was spent at engine torque pressures between 10 and 39 psi. No n_z peak outside of the threshold of 0.8g to 1.2g was experienced. The data discussed above are presented in Tables LXXIV and XCVII of Appendix II.

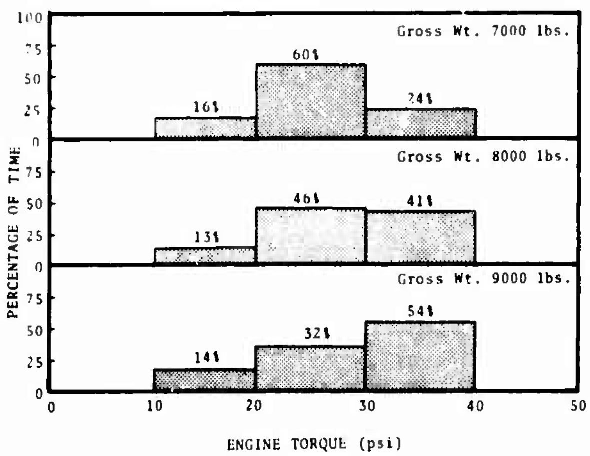


Figure 50. Percentage of Time Spent in Ground Taxi by Engine Torque and Gross Weight.

Begins and Ends in Flight

Because of the possibility of a jammed oscillograph magazine or an oscillograph running out of paper, flight conditions called "begins in flight" and "ends in flight" were formulated. Forty minutes after the beginning of one flight, the oscillogram used to edit the FCR data began to operate. Based upon the review of the other oscillogram, it can be concluded that only one rotor start occurred; however, for the purpose of clarity, this start was not included in the total number of rotor starts. Four occurrences of "ends in flight" were noted during this survey. One occurred during ground operations, and three, during level flight. The data discussed above are presented in Tables XCIX and C.

Initiations of Ascent

The flight condition "initiation of ascent" describes the maneuver which causes a climb to begin; it consists of the sharp application of forward longitudinal control movement and the possible increase of collective control. Initiations of ascent occurred during the change from the ground operation or the hover mission segment to the ascent mission segment.

Thirty-seven initiations of ascent from a hover occurred during this survey; they accounted for 9 percent of the time spent in the hover mission segment. The average duration of the initiations of ascent was approximately 10 seconds. As expected, 92 percent of the initiations of ascent time was spent below 40 knots, the remaining percentage, in the 40- to 60-knot range. The distribution of gross weight is shown in Figure 51. During many of the initiations of ascent, the normal operating limit of main rotor rpm was exceeded; 55 percent of the time was spent above 325 rpm. Likewise, the torque limit of 50 psi was exceeded 4 percent of the time, as shown in Figure 52. No n_z peaks were experienced during these maneuvers. The data discussed above are presented in Tables LXXV and CI of Appendix II.

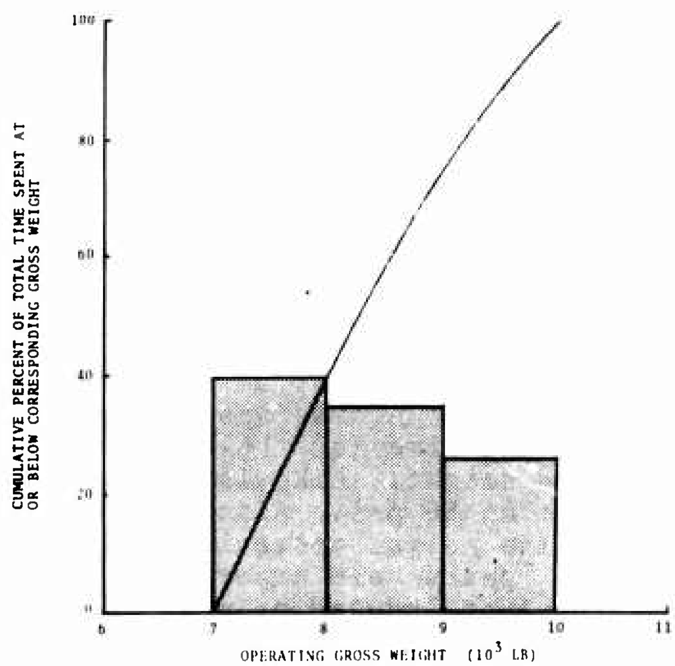


Figure 51. Cumulative Gross Weight Frequency Distribution for Initiation of Ascent in Hover.

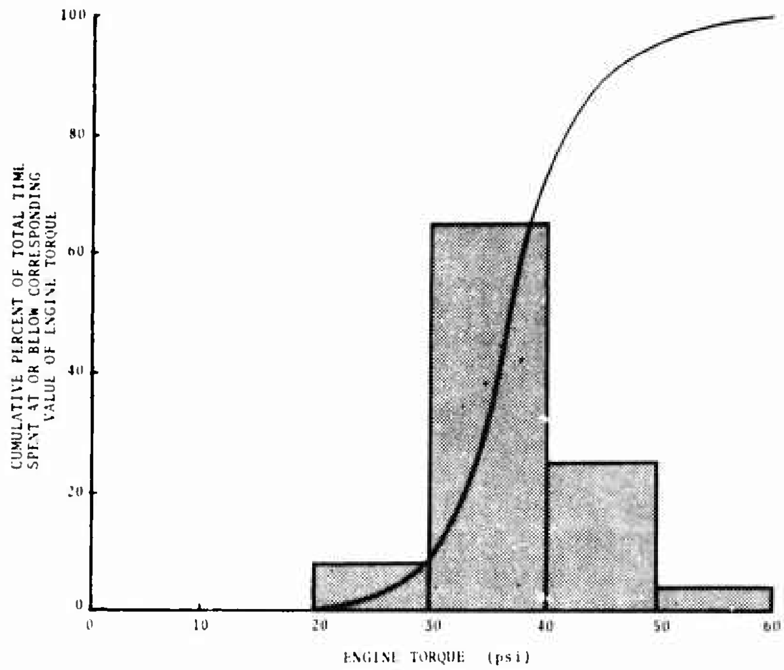


Figure 52. Cumulative Engine Torque in Frequency Distribution for Initiation of Ascent in Hover.

Seventeen initiations of ascent from the ground with an average duration of 11 seconds occurred. As shown in Figure 53, 85 percent of the time was spent below 40 knots, 12 percent within the 40- to 60-knot range, and the remaining 3 percent above 60 knots. The 17 initiations of ascent from the ground were not as severe as those from a hover, based on the data presented in Figures 54 and 55. Only 37 percent of the time for the initiations of ascent from the ground was spent above 8,000 pounds, whereas 57 percent of the time for those above the ground was spent above this gross weight. Likewise, no time was spent above the torque limit of 50 psi. Also, only 20 percent of the time was spent above the normal operating rpm limit of 324 rpm. No maneuver-induced n_z peaks were experienced during these maneuvers; however, one gust-induced n_z peak of 0.6g was experienced. The data discussed above are presented in Tables LXXV, XCII, and CI of Appendix II.

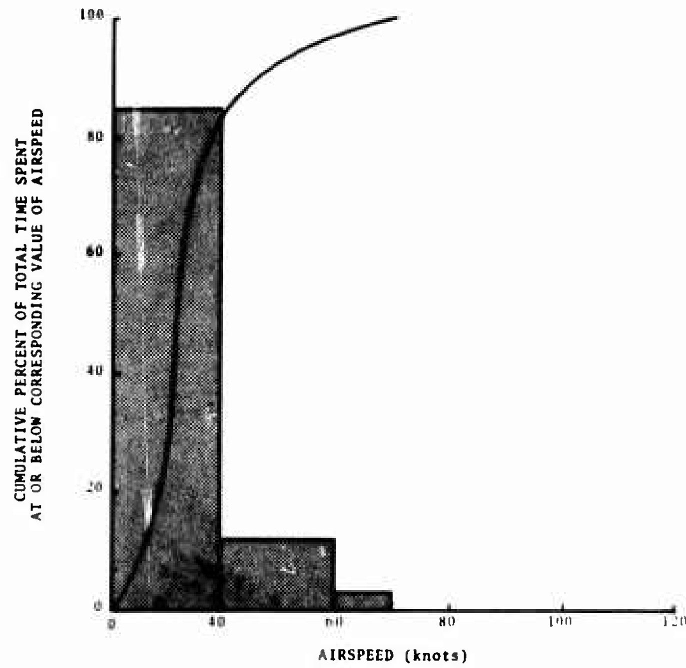


Figure 53. Cumulative Airspeed Frequency Distribution for Initiation of Ascent in Ascent.

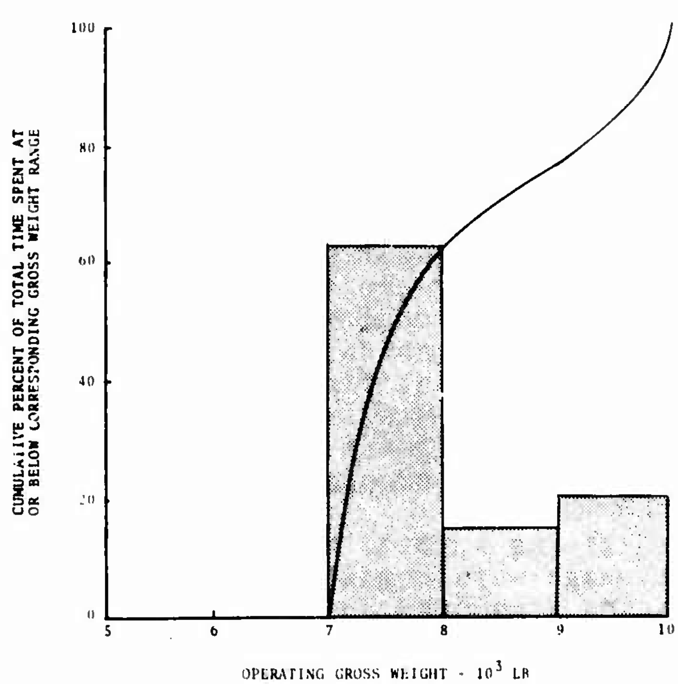


Figure 54. Cumulative Gross Weight Frequency Distribution for Initiation of Ascent in Ascent.

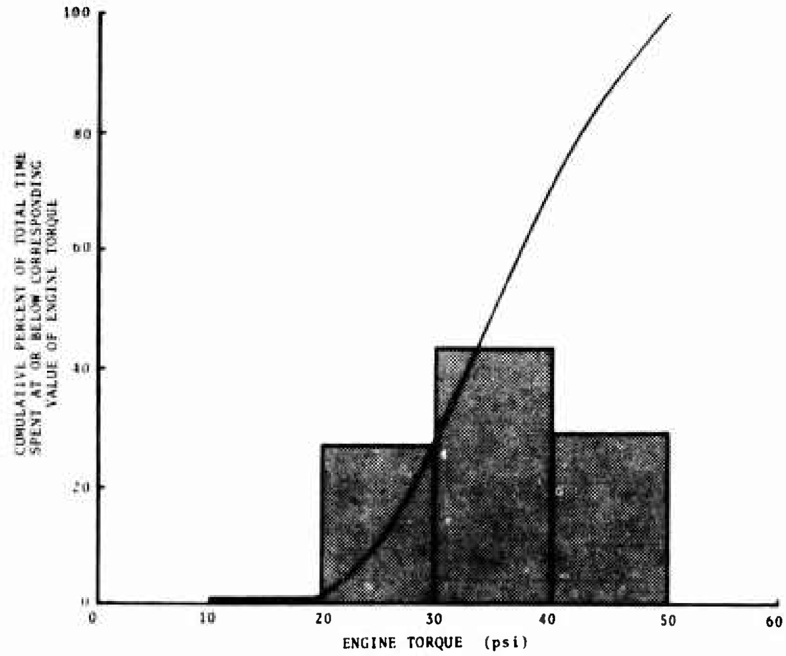


Figure 55. Cumulative Engine Torque Frequency Distribution for Initiation of Ascent in Ascent.

Left Turns

Left turns, which occurred during the hover, ascent, level flight, and descent mission segments, were characterized by the application of left cyclic and rudder control inputs followed by the reverse application of controls to recover. While not all turns could necessarily be identified, those turns which would be severe and fatigue damaging were identified. A total of 117 turns were identified during this survey. These turns occurred most frequently between the airspeed ranges of 80 to 85 and 100 to 105 knots, as depicted in Figure 56. Most of the time associated with the turns was spent in the level flight mission segment; the remaining time was evenly divided between the ascent and descent segments. The redline limit was exceeded during the descent segment. The left turns are further discussed in the following paragraphs.

Seven left turns lasting a total of 2.7 minutes and about 20 seconds on the average were conducted during the hover mission segment; these turns accounted for 4 percent of the time in this mission segment. These turns occurred within gross weight ranges of 7,000 to 9,000 pounds and at rotor speeds varying from 314 to over 334 rpm. Of the seven turns, two had normal n_z peaks of very short duration, one of 0.7g and one of 1.2g. One n_x peak of 0.10g was experienced during these hovering turns. Because of the small number of turns in this mission

segment, no graphical presentations are included herein; the data are presented in Tables LXXVI, LXXXIX, XCII, and CII of Appendix II.

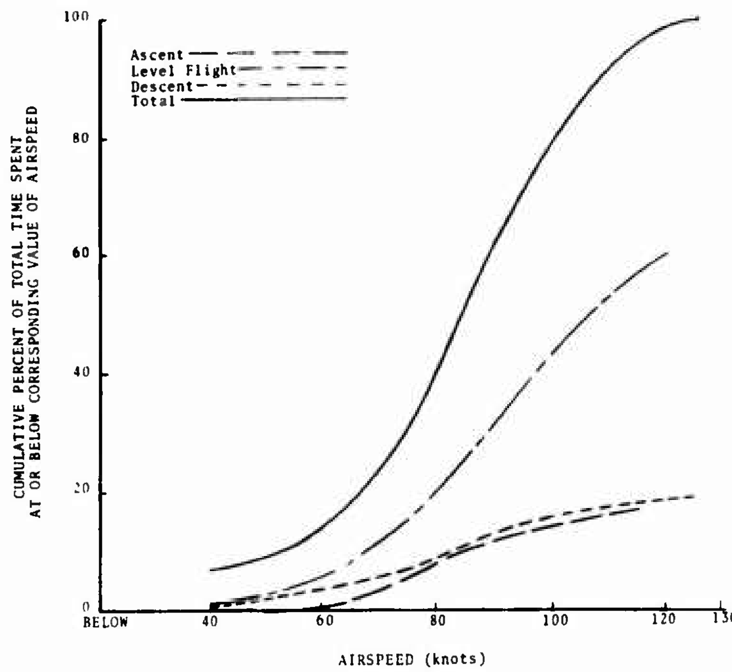


Figure 56. Cumulative Airspeed Frequency Distribution for Left Turn by Mission Segment.

Twenty left turns, averaging approximately 28 seconds in duration, were conducted during the ascent mission segment; these turns accounted for 4 percent of the time spent in the segment. As shown in Figure 56, most of the time spent in left turns during ascent was at airspeeds between 60 and 90 knots.

Sixty percent of the turns occurred at gross weights from 7,000 to 8,000 pounds; 4 percent, from 8,000 to 9,000 pounds; and the remaining 36 percent, from above 9,000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XII; most of the turns occurred within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XIII; most of the turns occurred during climbs of low rate. Nine turns had n_z peaks outside the narrower editing threshold of 0.9g to 1.1g, ranging from 0.8g to 1.2g. A histogram of the distribution of these occurrences is presented in Figure 57. The occurrence and duration of the maximum and all n_z peaks during left turns are presented in Table CII of Appendix II. In addition, the occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XIV. The remaining data concerning left turns during ascent are presented in Tables LXXVI and XCII of Appendix II.

TABLE XII. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR LEFT TURNS IN ASCENT

			ENGINE TORQUE					
WGT	RPM	PLW	10	20	30	40	50	SUM
7000	314			.18	3.62	.99		4.79
	325			.36	.14	.27		.77
	SUM			.54	3.76	1.26		5.56
8000	325				.13	.28		.41
9000	314			.28	.58	1.97		2.83
	325					.60		.60
	SUM			.28	.58	2.57		3.43

TABLE XIII. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR LEFT TURNS IN ASCENT

				AIRSPEED ACCELERATION						
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
7000	-300			.24	2.36	.08				2.68
	300				1.52	.16				1.68
	600			.08	.80					.88
	900				.32					.32
	SUM			.32	5.00	.24				5.56
8000	300				.41					.41
9000	-300				1.41					1.41
	300				1.09					1.09
	600				.93					.93
	SUM				3.43					3.43

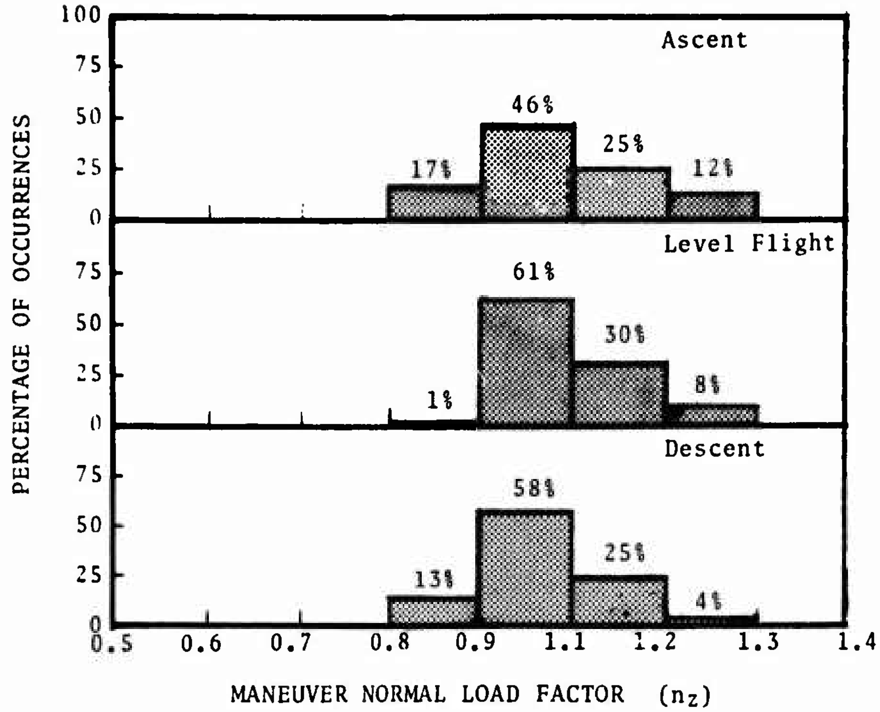


Figure 57. Percentage of Occurrences for Maneuver Normal Load Factor Peaks for Left Turn by Mission Segment.

TABLE XIV. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR LEFT TURNS IN ASCENT

WGT	VEL	NZ	OCCUR	DURATION
7000	60	1.1	2	0.06
	75	1.2	1	0.28
	80	0.8	2	0.03
		1.1	2	0.29
	85	0.8	1	0.01
		1.1	1	0.25
		1.2	1	0.26
	90	0.9	1	0.02
8000	75	1.2	1	0.33
9000	75	1.1	1	0.02

In the level flight mission segment, 71 left turns occurred; averaging approximately 29 seconds in duration, these turns accounted for 3 percent of the time spent in this segment. These left turns occurred most often within the airspeed ranges from 70 to 115 knots, as depicted in Figure 56. The distribution of time in left turns in level flight by gross weight is 5 percent in the 6,000- to 7,000-pound range, 24 percent in the 7,000- to 8,000-pound range, 41 percent in the 8,000- to 9,000-pound range, and 30 percent in the above 9,000-pound range. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XV; 88 percent of the time is within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XVI; slight variations in altitude occurred during turns in level flight. Twenty-two turns had 31 n_z peaks outside the narrower editing threshold and ranged from 0.8g to 1.2g. A histogram of the distribution of these occurrences is presented in Figure 57. The occurrence and duration of the maximum and all n_z peaks during left turns are presented in Table CII of Appendix II. In addition, the occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XVII. The remaining data concerning left turns in level flight are presented in Tables LXXVI and XCII of Appendix II.

TABLE XV. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR LEFT TURNS IN LEVEL FLIGHT

			ENGINE TORQUE					
WGT	RPM	PLW	10	20	30	40	50	SUM
6000	314			.87	1.00			1.87
7000	314			2.29	4.36	.88		7.53
	325			.23	.25			.48
	SUM			2.52	4.61	.88		8.01
8000	314		.07	3.90	4.27	2.04		10.28
	325			.70	1.52	1.24		3.46
	SUM		.07	4.60	5.79	3.29		13.74
9000	314		.03	2.90	2.52	4.79		10.23

TABLE XVI. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR LEFT TURNS IN LEVEL FLIGHT

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-300			.09	1.78					1.87
7000	-900				.28					.28
	-600				.26					.26
	-300			.09	7.01	.27				7.37
	300				.10					.10
	SUM			.09	7.65	.27				8.01
8000	-300			.25	12.33	.09				12.67
	300			.95		.12				1.07
	SUM			1.20	12.33	.21				13.74
9000	-300			.08	9.68	.08				9.84
	300				.39					.39
	SUM			.08	10.07	.08				10.23

TABLE XVII. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR LEFT TURNS IN LEVEL FLIGHT

WGT	VEL	NZ	OCCUR	DURATION
6000	40	1.1	1	0.08
	60	1.2	1	0.20
7000	40	1.1	3	0.19
	60	1.1	1	0.04
	95	1.1	1	0.01
	110	1.1	2	0.03
8000	40	1.1	1	0.13
	70	1.1	2	0.15
	75	1.2	2	0.43
	80	1.1	3	0.12
		1.2	1	0.13
	85	1.1	2	0.05
	90	1.1	1	0.05
	95	1.2	1	0.27
	100	0.8	1	0.02
	105	1.1	3	0.08
		1.2	1	0.09
9000	105	1.1	1	0.07
	115	1.1	3	0.14

Nineteen left turns, averaging approximately 33 seconds in duration, were conducted during the descent mission segment; these turns accounted for 5 percent of the time spent in this segment. Most of the time spent in left turns during descent was at airspeeds between 80 and 100 knots. The redline limit of 120 knots was exceeded for 10 seconds during one turn in descent.

Fifteen percent of the turns occurred at gross weights from 6000 to 7000 pounds; 33 percent from 7000 to 8000 pounds; 24 percent from 8000 to 9000 pounds; and the remaining 28 percent, above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XVIII; 68 percent of the turns occurred within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XIX; most of the turns occurred in descents of low rate. Five turns had 10 n_z peaks, ranging from 0.8g to 1.2g. A histogram of the distribution of these occurrences is presented in Figure 57. The occurrence and duration of the maximum and all n_z peaks during left turns are presented in Table CII of Appendix II. In addition, the occurrence of n_z peaks versus airspeed is contained in Table XX. The remaining data concerning left turns in descent are presented in Tables LXXVI and XCII of Appendix II.

TABLE XVIII. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR LEFT TURNS IN DESCENT

				ENGINE TORQUE				
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314			.66	.35			1.01
	325			.58				.58
	SUM			1.24	.35			1.59
7000	314		.09	1.60	.24			1.93
	325			.36	1.10			1.46
	SUM		.09	1.96	1.34			3.39
8000	314			.40	.71	.09		1.20
	325			.70	.62			1.32
	SUM			1.10	1.33	.09		2.52
9000	314			1.39	1.52			2.91

TABLE XIX. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR LEFT TURNS IN DESCENT

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-600			.12	1.30	.17				1.59
7000	-900				.24					.24
	-600				1.20					1.20
	-300				1.95					1.9
	SUM				3.39					3.39
8000	-900				.70					.70
	-600				.62					.62
	-300				1.20					1.20
	SUM				2.52					2.52
9000	-1200				.68					.68
	-600				.71					.71
	-300			.09	1.25	.18				1.52
	SUM			.09	2.64	.18				2.91

TABLE XX. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR LEFT TURNS IN DESCENT

WGT	VEL	NZ	OCCUR	DURATION
6000	40	0.8	1	0.01
	60	1.2	1	0.17
8000	80	1.1	1	0.02
	85	1.1	1	0.09
	90	1.1	1	0.06
	95	1.1	1	0.01
	100	0.8	1	0.01
9000	60	0.8	1	0.03
		1.1	1	0.03
	70	1.1	1	0.03

Right Turns

Right turns, which occurred during the hover, ascent, level flight, and descent mission segments, were characterized by the application of right cyclic and rudder control movements followed by the reverse application of controls to recover from the turn. As with the left turns, not all of the right turns could necessarily be identified; however, those which would be fatigue damaging were identified. The 176 right turns identified during this survey occurred most frequently at airspeeds between 80 and 95 knots, as shown in Figure 58. Once again, most of the time was spent in the level flight segment while the remaining time was evenly divided between the ascent and descent segments. The redline limit of 120 knots was exceeded once during the level flight segment. Further discussion of right turns is contained in the following paragraphs.

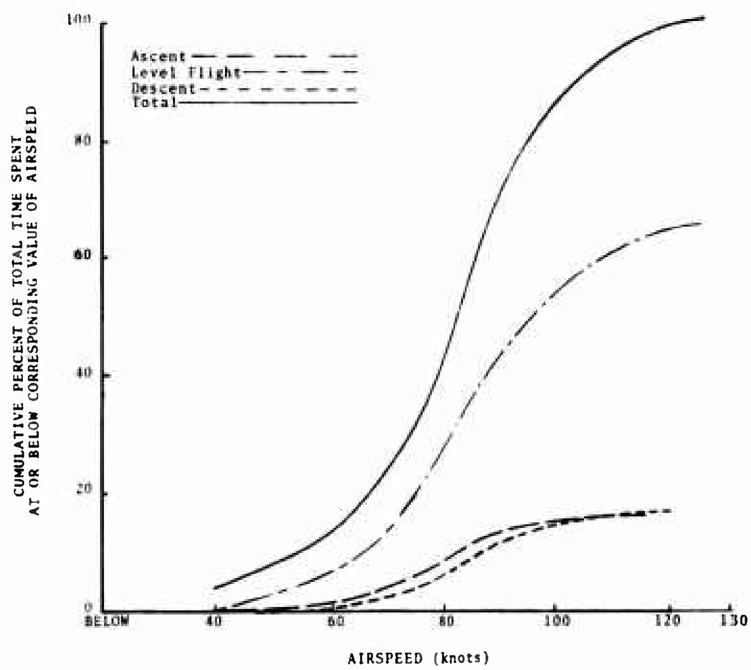


Figure 58. Cumulative Airspeed Frequency Distribution for Right Turn by Mission Segment.

Six right turns, with an average 22-second duration, were conducted in the hover mission segment. These turns occurred within the gross weight range of 8000 to 9000 pounds and at rotor speeds of 314 to over 334 rpm. None of the turns had normal load factor peaks. Because of the small number of turns in this mission segment, no graphical presentations are presented; the data are presented in Tables LXXVII and CIII of Appendix II.

Thirty turns, averaging 27 seconds in duration, were identified during the ascent mission segment; these turns accounted for 5 percent of the ascent time. As shown in Figure 58, most of the time spent in right turns during ascent was at airspeeds between 60 and 90 knots.

Two percent of the turns occurred at gross weights from 6000 to 7000 pounds; 34 percent, from 7000 to 8000 pounds; 43 percent, from 8000 to 9000 pounds; and the remaining 21 percent, above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXI; 45 percent of the time was spent above 324 rpm. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XXII; most of the turns were performed during the climbs of low rate. Eight turns had 13 maneuver-induced n_z peaks outside the narrower editing threshold and ranged from 0.6g to 1.3g. A histogram of the distribution of these occurrences is presented in Figure 59. The occurrence and duration of the maximum and all n_z peaks during right turns are presented in Table CIII of Appendix II. In addition, the occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XXIII. One turn had a gust-induced n_z peak of 1.2g as presented in Table XCI of Appendix II. The remaining data concerning right turns during ascent are presented in Table LXXVII and XCII of Appendix II.

TABLE XXI. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR RIGHT TURNS IN ASCENT

		ENGINE TORQUE						
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314					.29		.29
7000	314			.85	1.82	.44		3.11
	325		.09	.92	.35			1.36
	SUM		.09	1.77	2.17	.44		4.47
8000	314				.87	1.01		1.88
	325			.66	.84	2.31		3.81
	SUM			.66	1.71	3.32		5.69
9000	314				2.00			2.00
	325			.32	.08	.47		.87
	SUM			.32	2.08	.47		2.87

TABLE XXII. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR RIGHT TURNS IN ASCENT

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	300					.29				.29
7000	-300			.08	3.09	.08				3.25
	300			.33	.45					.78
	600				.28	.16				.44
	SUM			.41	3.82	.24				4.47
8000	-300				1.93	.08				2.01
	300				2.73	.02				2.75
	600				.57					.57
	900			.23	.13					.36
	SUM			.23	5.36	.10				5.69
9000	-300				.25					.25
	300				2.15					2.15
	600				.47					.47
	SUM				2.87					2.87

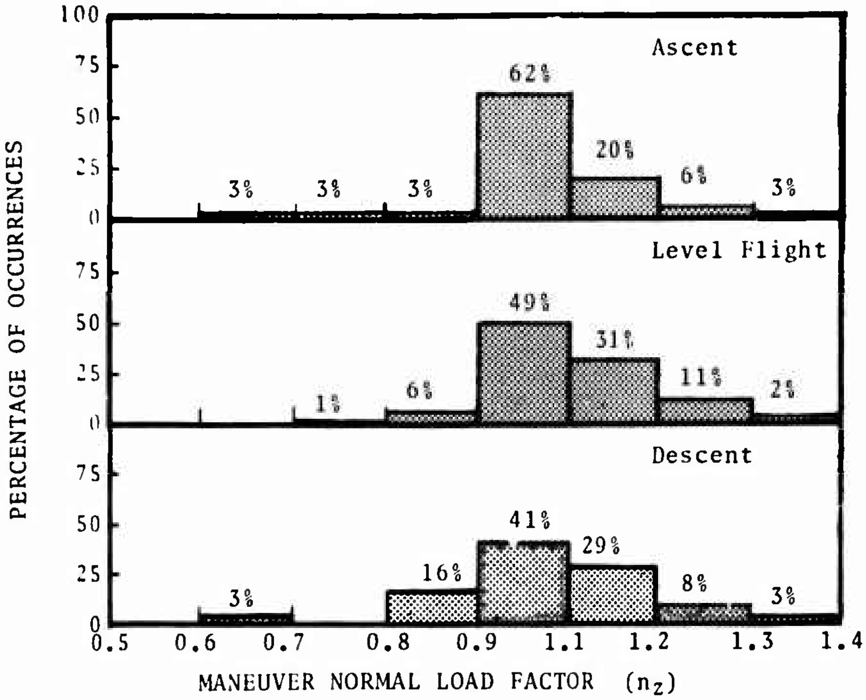


Figure 59. Percentage of Occurrences for Maneuver Normal Load Factor Peaks for Right Turn by Mission Segment.

TABLE XXIII. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR RIGHT TURNS IN ASCENT

WGT	VFL	NZ	OCCUR	DURATION
7000	60	0.8	1	0.02
		1.1	1	0.01
	75	1.1	1	0.07
	85	1.1	1	0.02
	90	1.2	1	0.02
	105	0.7	1	0.03
	110	0.6	1	0.03
		1.3	1	0.03
8000	40	1.1	1	0.09
	75	1.1	1	0.08
	80	1.1	2	0.20
	90	1.2	1	0.03

In the level flight mission segment, 111 right turns averaging 27 seconds in duration occurred; these turns accounted for 4 percent of the time in that mission segment. These turns occurred most often at airspeeds of 75 to 95 knots, as depicted in Figure 58. The redline limit was exceeded once for 10 seconds.

Nine percent of the turns occurred at gross weights from 6000 to 7000 pounds; 33 percent, from 7000 to 8000 pounds; 40 percent, from 8000 to 9000 pounds; and the remaining 18 percent, above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXIV; 28 percent of the time was spent above 325 rpm. Likewise, the distribution of airspeed acceleration and rate of climb are presented in Table XXV; slight variations in altitude occurred during right turns in level flight. Thirty-nine turns had 74 maneuver-induced n_z peaks outside the narrower editing threshold and ranged from 0.7g to 1.3g. A histogram of the distribution of these occurrences is presented in Figure 59. The occurrence and duration of the maximum and all n_z peaks during right turns are presented in Table CIII of Appendix II. In addition, the occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XXVI. Seven occurrences of gust-induced n_z peaks ranging from 0.6g to 1.2g were observed during the 111 right turns as presented in Table XCI of Appendix II.

In addition, one turn experienced an n_y peak of -0.10g as presented in Table XC of Appendix II. The remaining data concerning right turns in level flight are also presented in Tables LXXVII and XCII of Appendix II.

TABLE XXIV. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR RIGHT TURNS IN LEVEL FLIGHT

			ENGINE TORQUE					
WGT	RPM	OLW	10	20	30	40	50	SUM
6000	314		.09	3.81	.12			4.02
	325			1.04				1.04
	SUM		.09	4.85	.12			5.06
7000	314			4.50	6.55	1.17		12.22
	325		.47	2.50	2.69	.11		5.77
	SUM		.47	7.00	9.24	1.28		17.99
8000	314			4.91	7.30	2.32		14.53
	325		.05	2.61	4.67	.16		7.49
	SUM		.05	7.52	11.97	2.48		22.02
9000	314			3.21	2.70	3.03		8.94
	325			.55	.36			.91
	SUM			3.76	3.06	3.03		9.85

TABLE XXV. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR RIGHT TURNS IN LEVEL FLIGHT

				AIRSPEED ACCELERATION						
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-300			.34	4.46	.26				5.06
7000	-300			.40	14.82	.60				15.82
	300				2.08	.09				2.17
	SUM			.40	16.90	.69				17.99
8000	-900				.13		.06			.19
	-600		.08	.14	1.90	.08				2.20
	-300			.35	18.40	.18				18.93
	300			.02	.68					.70
	SUM		.08	.51	21.11	.26	.06			22.02
9000	-300		.03	.05	9.77					9.85

TABLE XXVI. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR RIGHT TURNS IN LEVEL FLIGHT

WGT	VEL	NZ	OCCUR	DURATION
6000	PL	1.1	1	0.04
	60	0.8	1	0.01
		1.1	2	0.05
	70	1.2	1	0.10
	75	0.8	2	0.02
		1.1	2	0.03
		1.2	2	0.10
	80	0.8	1	0.04
		1.1	2	0.04
	85	1.1	1	0.03
	90	1.1	2	0.03
	95	0.8	1	0.01
		1.1	2	0.02
	100	1.1	1	0.01
	105	1.1	1	0.01
7000	40	1.2	2	0.23
	60	1.1	3	0.13
		1.3	1	0.29
	70	1.1	1	0.01
		1.3	1	0.19
	80	1.1	1	0.02
		1.2	1	0.42
	85	1.1	1	0.03
	90	0.8	1	0.02
	95	0.8	1	0.01
		1.1	1	0.03
		1.2	1	0.06
	105	0.7	1	0.02
		1.2	1	0.01
	110	0.7	1	0.01
		1.2	1	0.02
8000	40	1.1	3	0.14
		1.2	3	0.26
	60	1.2	1	0.03
	75	1.1	3	0.10
		1.2	1	0.27
	80	1.1	1	0.10
	85	1.1	3	0.18
		1.2	1	0.02
	90	0.8	1	0.01
		1.1	4	0.16
	95	1.1	2	0.07
		1.2	1	0.05
	105	1.1	2	0.06
		1.3	1	0.30
9000	60	1.1	1	0.01
	70	1.1	1	0.05
	75	1.1	1	0.02
	80	1.1	2	0.12
	115	1.1	1	0.04

Twenty-nine right turns, averaging approximately 30 seconds in duration, were conducted during the descent mission segment; these turns accounted for 7 percent of the time spent in the segment. Most of the time spent in right turns during descent was at airspeeds between 75 and 90 knots.

Thirteen percent of the turns occurred at gross weights from 6000 to 7000 pounds; 25 percent, from 7000 to 8000 pounds; 28 percent, from 8000 to 9000 pounds; and the remaining 33 percent above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXVII; 23 percent of the time was spent above 325 rpm. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XXVIII; 21 percent of the time spent in right turns was at a rate of descent greater than 1,200 feet per minute. Thirteen turns had 19 maneuver-induced n_z peaks outside the narrower editing threshold and ranged from 0.6g to 1.3g. A histogram of the distribution of these occurrences is presented in Figure 59. The occurrence and duration of the maximum and all n_z peaks during right turns are presented in Table CIII of Appendix II. In addition, the occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XXIX. Five occurrences of gust-induced n_z peaks ranging from 0.7g to 1.3g were observed during the 29 right turns as presented in Table XCI of Appendix II. The remaining data concerning right turns in descent are presented in Tables LXXVII and XCII of Appendix II.

TABLE XXVII. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR RIGHT TURNS IN DESCENT

			ENGINE TORQUE					
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314			1.20	.17	.09		1.46
	325		.12	.24				.36
	SUM		.12	1.44	.17	.09		1.82
7000	314		1.32	1.26	.60	.16		
	325		.36					
	SUM		1.68	1.26	.60	.16		3.70
8000	314		.42	1.47	.17			
	325		.34	.54	.96	.11		
	SUM		.76	2.01	1.13	.11		4.01
9000	314		.31	2.43	.37	.95		
	325		.18	.50				
	SUM		.49	2.93	.37	.95		4.74

TABLE XXVIII. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR RIGHT TURNS IN DESCENT

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-900				.77	.08				.85
	-600				.97					.97
	SUM				1.74	.08				1.82
7000	-1800				.45					.45
	-1500				.66				.02	.68
	-1200			.08	.48					.56
	-600			.16	.91					1.07
	-300		.02	.16	.76					.94
	SUM		.02	.40	3.26				.02	3.70
8000	-1500				.63					.63
	-1200				.41					.41
	-900			.08	1.08	.03				1.19
	-600			.13	.53					.66
	-300		.02	.08	1.02					1.12
	SUM		.02	.29	3.67	.03				4.01
9000	-2100				.21					.21
	-900				.84					.84
	-600			.14	.98					1.12
	-300				2.49	.08				2.57
	SUM			.14	4.52	.08				4.74

TABLE XXIX. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR RIGHT TURNS IN DESCENT

WGT	VEL	NZ	OCCUR	DURATION
6000	60	1.1	1	0.01
7000	BL	1.2	1	0.04
	40	0.8	1	0.01
		1.1	1	0.06
	80	1.2	1	0.41
	85	1.2	1	0.02
	90	0.6	1	0.02
		1.1	1	0.06
	95	1.1	2	0.06
		1.3	1	0.07
8000	60	1.1	1	0.11
	80	1.1	1	0.02
	85	1.1	1	0.01
	90	0.8	1	0.02
	95	1.1	1	0.03
	115	1.1	1	0.01
9000	80	1.1	1	0.03
	100	0.8	1	0.04

Pushovers

The collective and cyclic pushover flight conditions were identified as maneuvers which reduced or terminated ascents and initiated or increased descents. In each case, there was a decrease in engine torque and the possibility of a negative normal load factor peak.

This section will discuss both types of pushovers which occurred in the various mission segments. Pictorial and tabular presentaticns for collective pushovers will be discussed in the following paragraphs. However, because of the very small number of cyclic pushovers, no specific graphical presentation will be made.

One collective pushover occurred in the hover mission segment and lasted 5.4 seconds. It occurred at a gross weight between 8000 and 9000 pounds and did not generate either a gust- or a maneuver-induced n_z peak. Data for this occurrence are presented in Tables LXXVIII and CIV of Appendix II.

Thirty-one collective pushovers averaging approximately 11 seconds in duration were conducted in the ascent mission segment; these pushovers accounted for 2 percent of the time spent in the segment. As shown in Figure 60, most of the time spent in collective pushovers during ascents was at airspeeds between 70 and 85 knots.

Fourteen percent of the pushovers occurred at gross weights from 6000 to 7000 pounds; 47 percent, from 7000 to 8000 pounds; 33 percent, from 8000 to 9000 pounds; and the remaining 6 percent, above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXX; 74 percent of the pushovers occurred within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XXXI; most of the pushovers in the ascent mission segment occurred at relatively low rates of climb. Only one pushover, at a gross weight between 8000 to 9000 pounds, generated n_z peaks. Within the same maneuver, a negative n_z peak of 0.7g and then a positive n_z peak of 1.2g were generated, as shown in Table CIV of Appendix II. From Table XXXII, the airspeed at the two peaks is 85 and 40 knots for the 0.7g and 1.2g peaks, respectively. The remaining data concerning collective pushovers during ascent are presented in Tables LXXVIII and XCII of Appendix II.

TABLE XXX. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN ASCENT

			ENGINE TORQUE					
WGT	RPM	PLW	10	20	30	40	50	SUM
6000	314			.16	.37	.30		.83
7000	314			.74	1.31	.29		2.34
	325			.12	.24	.09		.45
	SUM			.86	1.55	.38		2.79
8000	304				.07	.07		.14
	314		.25	.17	.10	.21		.73
	325		.13	.23	.36	.36		1.08
	SUM		.38	.40	.53	.64		1.95
9000	314				.35			.35

TABLE XXXI. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN ASCENT

				AIRSPEED ACCELERATION						
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-300				.43	.10				.53
	300				.30					.30
	SUM				.73	.10				.83
7000	-600				.32					.32
	-300				1.20	.02				1.22
	300				.36					.36
	600				.66					.66
	900				.23					.23
	SUM				2.77	.02				2.79
8000	-300				.84					.84
	300			.06	.45	.10				.61
	600				.22					.22
	900					.14				.14
	1200									
	1500				.14					.14
	SUM			.06	1.65	.24				1.95
9000	-300				.05					.05
	300				.30					.30
	SUM				.35					.35

TABLE XXXII. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN ASCENT

WGT	VEL	NZ	OCCUR	DURATION
8000	40	1.2	1	0.01
	85	0.7	1	0.02

In the level flight mission segment, 84 collective pushovers were conducted to initiate a descent; they averaged 9 seconds in duration and accounted for one percent of the time in the mission segment. These pushovers occurred most often within the airspeed range from 80 to 110 knots, as depicted in Figure 60. Seven percent of the pushovers occurred at gross weights from 6000 to 7000 pounds; 40 percent, from 7000 to 8000 pounds; 44 percent, from 8000 to 9000 pounds; and the remaining 9 percent, above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXXIII; 70 percent of the pushovers occurred within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XXXIV. Most of the pushovers occurring in the level flight segment initiated a descent at rates of 300 to 600 feet per minute. Five pushovers generated maneuver n_z peaks of 0.7g; two of these five pushovers also had positive n_z peaks of 1.2g as indicated in Table CIV of Appendix II. The occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XXXV; n_z peaks were generated during pushovers which occurred at airspeeds from below 40 knots to 95 knots. In addition, one gust-induced n_z peak of 0.7g and one of 1.2g occurred during the remaining 79 collective pushovers, as shown in Table XCI of Appendix II. The remaining data concerning collective pushovers during level flight are presented in Tables LXXVIII and XCII of Appendix II.

Twenty-three collective pushovers, averaging 14 seconds, occurred in the descent mission segment. In general, these maneuvers tended to increase the rate of descent. They occurred at gross weights ranging from 6000 to 9000 pounds. Thirty-seven percent of the time spent in this flight condition was above the normal operating limit for rotor speed. Rates of descent varied from 300 to 1,200 feet per minute. One pushover generated an n_z peak of 1.2g, as shown in Table CIV of Appendix II. Additional data are presented in Tables LXXVIII and XCII of Appendix II.

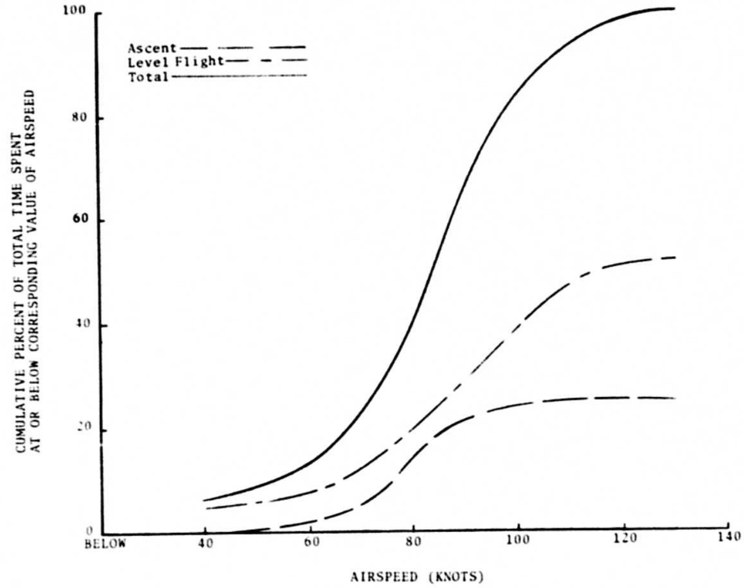


Figure 60. Cumulative Airspeed Frequency Distribution for Collective Pushover by Mission Segment.

TABLE XXXIII. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN LEVEL FLIGHT

			ENGINE TORQUE					
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314			.46	.34	.03		.83
7000	304					.05		.05
	314		.09	.61	2.33	.67		3.70
	325		.06	.38	.68	.07		1.19
	SUM		.15	.99	3.01	.79		4.94
8000	314			.66	1.03	1.23		2.92
	325		.03	1.09	.97	.30		2.39
	334					.10		.10
	SUM		.03	1.75	2.00	1.63		5.41
9000	314			.12	.80	.09		1.01
	325				.05			.05
	SUM			.12	.85	.09		1.06

TABLE XXXIV. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN LEVEL FLIGHT

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-600			.15	.11	.07				.33
	-300			.06	.44					.50
	SUM			.21	.55	.07				.83
7000	-1500				.27					.27
	-1200									
	-900									
	-600				.45					.45
	-300			.06	2.60	.19				2.85
	300		.09	.05	1.02	.14				1.30
	600				.07					.07
	SUM		.09	.11	4.41	.33				4.94
8000	-900				.14					.14
	-600				1.02	.05				1.07
	-300			.27	3.16	.04				3.47
	300			.06	.44					.50
	600									
	900			.08	.10					.18
	1200									
	1500				.05					.05
	SUM			.41	4.91	.09				5.41
9000	-900				.09					.09
	-600				.44					.44
	-300				.53					.53
	SUM				1.06					1.06

TABLE XXXV. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR COLLECTIVE PUSHOVERS IN LEVEL FLIGHT

WGT	VEL	NZ	OCCUR	DURATION
6000	40	0.7	1	0.03
	80	1.2	1	0.01
7000	85	0.7	1	0.01
	85	1.2	1	0.00
	95	0.7	1	0.01
8000	PL	0.7	1	0.01
	80	0.7	1	0.02

In contrast to the 139 collective pushovers, only 12 cyclic pushovers occurred during the survey. One occurred in the ascent mission segment at a gross weight between 7000 and 8000 pounds; no n_z peak was generated during this condition. Six cyclic pushovers occurred during level flight. The gross weight of these conditions ranged from 7,000 to 8,000 pounds; no n_z peaks were generated during these pushovers. Within the descent mission segment, five pushovers occurred at gross weights between 7000 and 8000 pounds. Two of these five had n_z peaks of 1.2g. Data for these various occurrences are contained in Tables LXXIX, XCII, and CV of Appendix II.

Finally, the cumulative frequency distribution of airspeed for collective and cyclic pushovers is presented in Figure 61. Collective pushovers were generally performed at higher airspeeds than cyclic pushovers. Also, from the above presentation, it can be seen that collective pushovers are more frequent and more severe than cyclic pushovers.

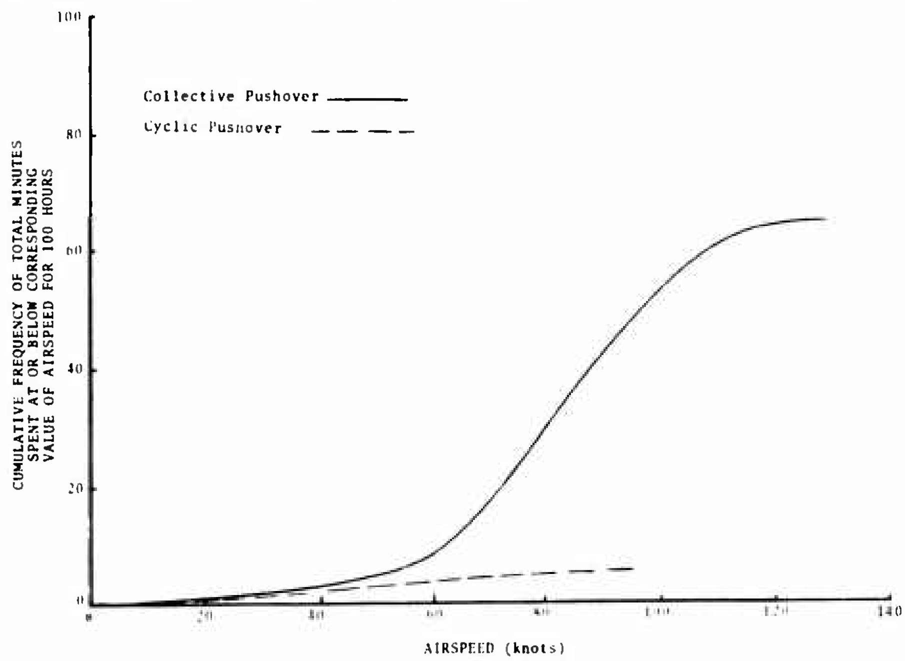


Figure 61. Comparison of Cumulative Airspeed Frequency Distribution for Collective Pushover With That for Cyclic Pushover.

Pull-ups

The collective and cyclic pull-up flight conditions were identified as maneuvers which initiated or increased ascents and decreased or terminated descents. In each case, there was an increase in torque and the possibility of a positive normal load factor peak.

This section will discuss both types of pull-ups which occurred in the various mission segments. Pictorial and tabular presentations for collective pull-ups will be discussed in the following paragraphs. However, because of the very small number of cyclic pull-ups, no specific graphical presentations will be made; the discussion will be limited to the tabular presentation of Appendix II.

One collective pull-up occurred in the hover mission segment and lasted 5 seconds. It occurred at a gross weight between 8000 and 9000 pounds and did not generate an n_z peak. Data for this occurrence are presented in Tables LXXX and CVI of Appendix II.

Seven collective pull-ups, averaging 5 seconds, occurred in the ascent segment. In general, these maneuvers tended to increase the rate of ascent. The gross weights at which they occurred ranged from 7000 to 9000 pounds. Sixty-five percent of the time in pull-ups was spent above the normal rotor speed operating limit. Rates of ascent varied from 300 to 900 feet per minute. No n_z peaks were generated during these pull-ups. Additional data are presented in Tables LXXX and CVI of Appendix II.

In the level flight mission segment, 34 collective pull-ups were conducted to terminate a descent; they averaged 10 seconds in duration and accounted for less than one percent of the mission segment time. These pull-ups occurred most often at airspeeds below 40 knots; above 40 knots, the pull-ups were evenly distributed among the airspeed ranges up to 95 knots.

Eight percent of the pull-ups occurred at gross weights from 6000 to 7000 pounds; 36 percent, from 7000 to 8000 pounds; 48 percent, from 8000 to 9000 pounds; and the remaining 8 percent, from above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXXVI; 67 percent of the pull-ups occurred within the normal operating range of rotor speed. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XXXVII; rates of descent varied from 300 to 1200 feet per minute. Two pull-ups generated n_z peaks of 1.2g to 1.3g as indicated in Table CVI of Appendix II. The occurrence of n_z peaks in n_z versus airspeed ranges is contained in Table XXXVIII; n_z peaks were generated during pull-ups at airspeeds of 85 and 95 knots. One n_x peak of 0.10g was observed during one of the collective pull-ups; the data are presented in Table LXXXIX of Appendix II. The remaining data concerning collective pull-ups during level flight are presented in Tables LXXX and XCII of Appendix II.

TABLE XXXVI. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN LEVEL FLIGHT

			ENGINE TORQUE					
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314			.36	.13			.49
7000	304					.04		.04
	314		.14	.80	.50			1.44
	325		.26	.16	.13			.55
	SUM		.40	.96	.63	.04		2.03
8000	314		.09	.85	.60	.14	.03	1.71
	325		.14	.44	.55			1.13
	SUM		.23	1.29	1.15	.14	.03	2.84
9000	314			.19		.09		.28
	325		.24					.24
	SUM		.24	.19		.09		.52

TABLE XXXVII. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN LEVEL FLIGHT

				AIRSPEED ACCELERATION						
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-300				.16	.33				.49
7000	-600		.04	.38	.37	.12	.14			1.05
	-300			.52	.31	.15				.98
	SUM		.04	.90	.68	.27	.14			2.03
8000	-1200				.05					.05
	-900		.03	.07	.44					.54
	-600		.03		.44					.47
	-300			.17	1.04		.03			1.24
	300		.14		.33	.07				.54
	SUM		.20	.24	2.30	.07	.03			2.84
9000	-300				.52					.52

TABLE XXXVIII. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN LEVEL FLIGHT

WGT	VEL	NZ	OCCUR	DURATION
7000	60	1.3	1	0.02
8000	80	1.2	1	0.01

Thirty-eight collective pull-ups, averaging 9 seconds in duration, occurred in the descent segment; these pull-ups accounted for 3 percent of the segment time. Large equal amounts of time were spent in the airspeed ranges between 40 and 70 knots and between 95 and 105 knots, as depicted in Figure 62. Twelve percent of the pull-ups occurred at gross weights from 6000 to 7000 pounds; 34 percent, from 7000 to 8000 pounds; 38 percent, from 8000 to 9000 pounds; and the remaining 16 percent, from above 9000 pounds. The distribution of time in ranges of engine torque versus rotor speed is presented in Table XXXIX; 35 percent of the pull-ups occurred above 324 rpm. Likewise, the distributions of airspeed acceleration and rate of climb are presented in Table XL; most of the pull-ups in the descent segment occurred at relatively low descent rates, although rates of descent as high as 2,100 feet per minute were observed. Two pull-ups generated n_z peaks of 1.2g, as indicated in Table CVI of Appendix II. From Table XLI, the airspeed at these peaks were 60 and 105 knots while the coincident gross weights were 8,000 and 7,000 pounds, respectively. One n_x peak of 0.10g was observed during one of the collective pull-ups; the data are presented in Table LXXXIX. The remaining data concerning collective pull-ups during descent are presented in Tables LXXX and XCII of Appendix II.

In contrast to the 80 collective pull-ups, only 37 cyclic pull-ups occurred during the survey. Eight pull-ups occurred in the hover mission segment, three at gross weights from 7000 to 8000 pounds; four, from 8000 to 9000 pounds; and the remaining one, from above 9000 pounds. No n_z peaks were associated with these pull-ups. One pull-up occurred in the ascent mission segment at a gross weight in the 7000- to 8000-pound range; no n_z peaks were generated. During the level flight segment, 15 cyclic pull-ups, averaging 13 seconds, were performed. The gross weight at these pull-ups ranged from 7000 to 8000 pounds. Vertical acceleration peaks of 1.3g for one pull-up and 1.4g for two pull-ups were generated. Thirteen pull-ups with an average duration of 19 seconds occurred in the descent mission segment; they occurred at gross weights between 6000 and 9000

pounds. Two pull-ups each generated maneuver n_z peaks of 1.3g as shown in Table CVII of Appendix II. One gust-induced n_z peak of 1.2g was observed; data for the occurrence are presented in Table XCI. Data for these cyclic pull-ups are contained in Tables LXXXI, XCII, and CVII of Appendix II.

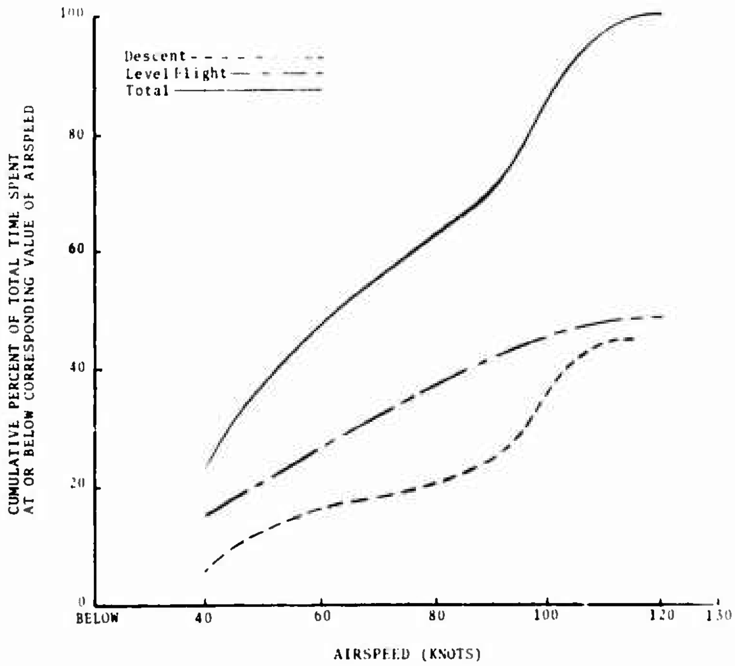


Figure 62. Cumulative Airspeed Frequency Distribution for Collective Pull-up by Mission Segment.

TABLE XXXIX. TIME FOR TORQUE VERSUS ROTOR SPEED BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN DESCENT

			ENGINE TORQUE					
WGT	RPM	BLW	10	20	30	40	50	SUM
6000	314		.29	.35				.64
7000	314		.07	1.01	.31			1.39
	325		.24		.16			.40
	334		.06					.06
	SUM		.37	1.01	.47			1.85
8000	314	.19	.20	.09	.36			.84
	325		.30	.55	.36			1.21
	SUM	.19	.50	.64	.72			2.05
9000	314		.10	.17	.42			.69
	325		.14	.07				.21
	SUM		.24	.24	.42			.90

TABLE XL. TIME FOR AIRSPEED ACCELERATION VERSUS RATE OF CLIMB BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN DESCENT.

		AIRSPEED ACCELERATION								
WGT	R/C	-12	-9	-6	-3	3	6	9	12	SUM
6000	-1800				.35					.35
	-1500									
	-1200									
	-900									
	-600				.29					.29
	SUM				.64					.64
7000	-1200				.10					.10
	-900				.60					.60
	-600				.20					.20
	-300			.49	.46					.95
	SUM			.49	1.36					1.85
8000	-2100				.07					.07
	-1800				.05					.05
	-1500				.26					.26
	-1200				.25					.25
	-900			.03	.25					.28
	-600			.13	.19	.05				.37
	-300		.02	.25	.50					.77
	SUM		.02	.41	1.57	.05				2.05
9000	-1500				.10					.10
	-1200									
	-900				.10					.10
	-600			.10	.43					.53
	-300				.17					.17
	SUM			.10	.80					.90

TABLE XLI. TIME FOR MANEUVER n_z PEAKS VERSUS AIRSPEED BY GROSS WEIGHT FOR COLLECTIVE PULL-UPS IN DESCENT

WGT	VEL	NZ	OCCUR	DURATION
7000	105	1.2	1	0.02
8000	60	1.2	1	0.01

Finally, the cumulative frequency distribution of airspeed for collective and cyclic pull-ups is presented in Figure 63. Most of the collective pull-ups occurred at airspeeds between 40 and 60 knots and between 90 and 100 knots, and most of the cyclic pull-ups occurred at airspeeds below 40 knots and between 80 and 90 knots.

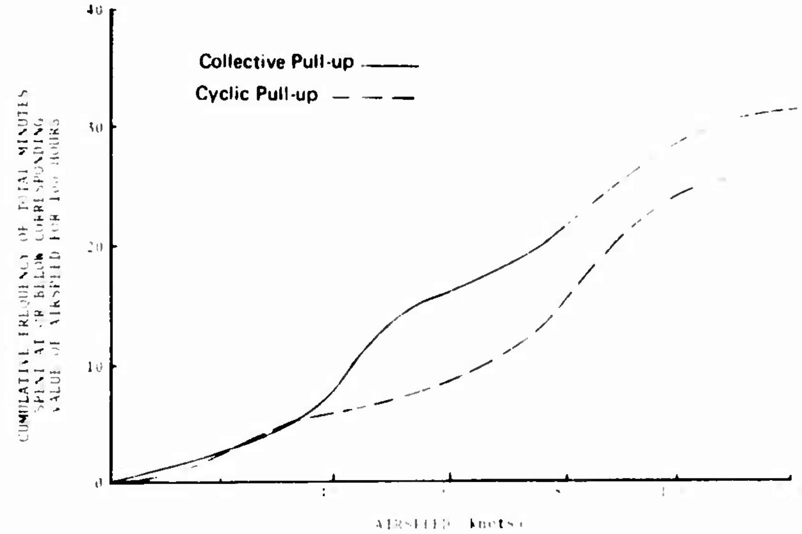


Figure 63. Comparison of Cumulative Airspeed Frequency Distribution for Collective Pull-up With That for Cyclic Pull-up.

Flares

The flare flight condition was processed as a collective pull-up which occurred before a landing or a hover. It is characterized by the increase in engine torque and the decrease in rate of descent. This flight condition occurred during the level flight and descent mission segments during this operational survey.

Fifty-one flares lasting a total of 15.2 minutes were conducted during the descent mission segment; the flares accounted for 7 percent of the time spent in this mission segment. The average flare duration was approximately 18 seconds. The distribution of gross weight during flares was normally divided among the gross weight ranges, as shown in Figure 64. Most of the flares occurred at airspeeds below 60 knots. During many of the flares, the normal operating rotor rpm limit of 324 rpm was exceeded; 40 percent of the time was spent in the 325 to 334 rpm range. Figure 65 presents a histogram and the cumulative frequency distribution for engine torque during the 51 flares; practically all of the time was spent below 40 psi. During these flares, the rate of descent varied from 0 to 1,200 feet per minute. As shown in Figure 66, the descent rate decreased as gross

weight increased. No n_z peak outside the threshold of 0.8g to 1.2g was experienced; all of these flares were conducted gradually to minimize maneuver loads. One n_x peak of 0.10g was observed during one of the flares; the data are presented in Table LXXXIX. The data discussed above are presented in Tables LXXXII and CVIII of Appendix II.

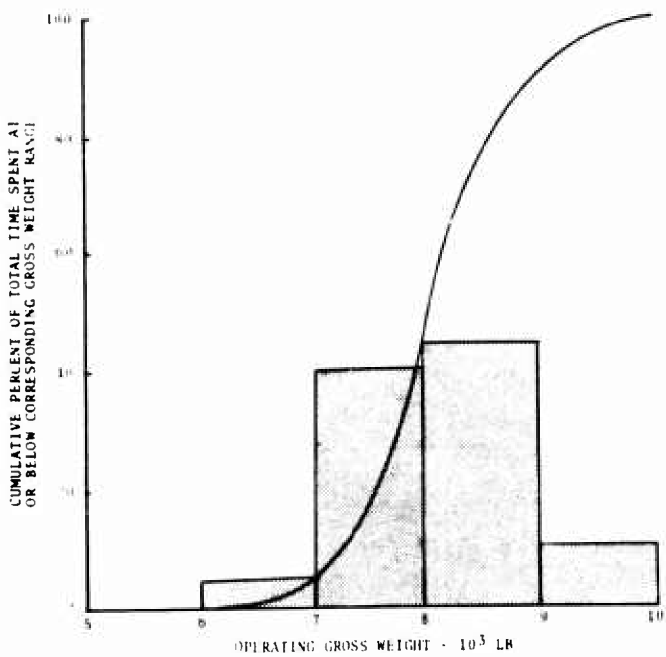
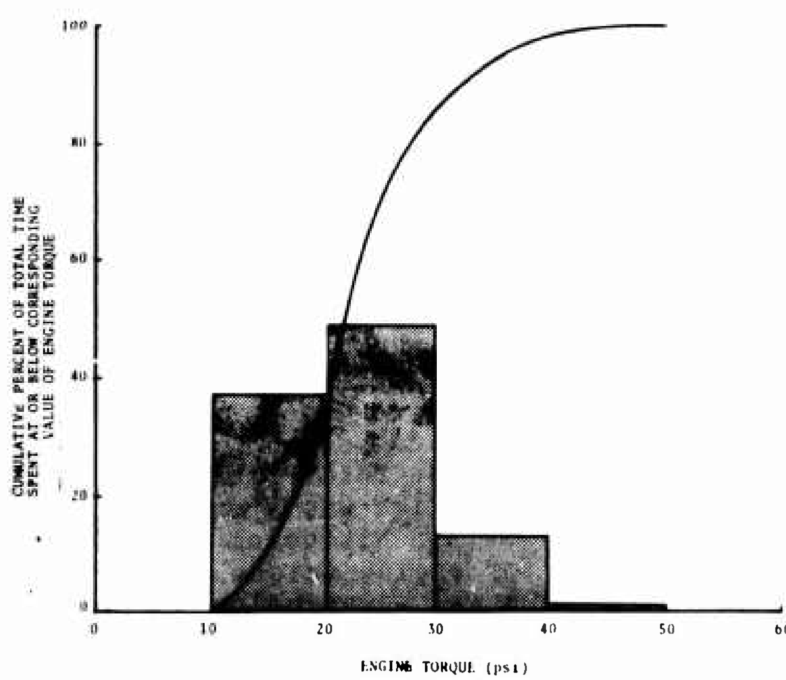


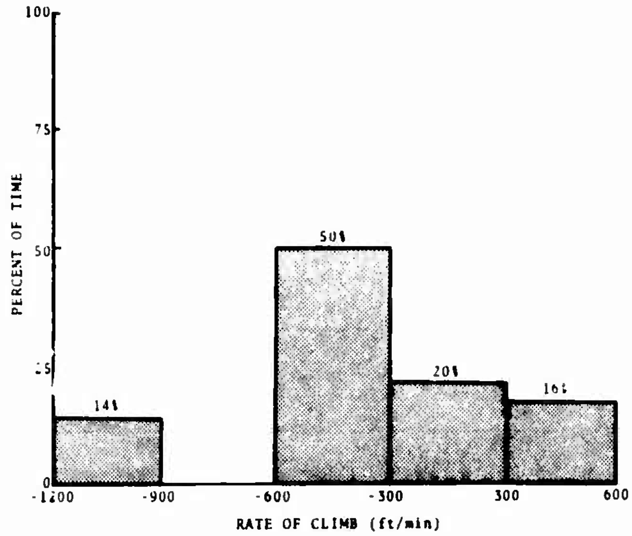
Figure 64.

Cumulative Gross Weight Frequency Distribution for Flare During Descent.

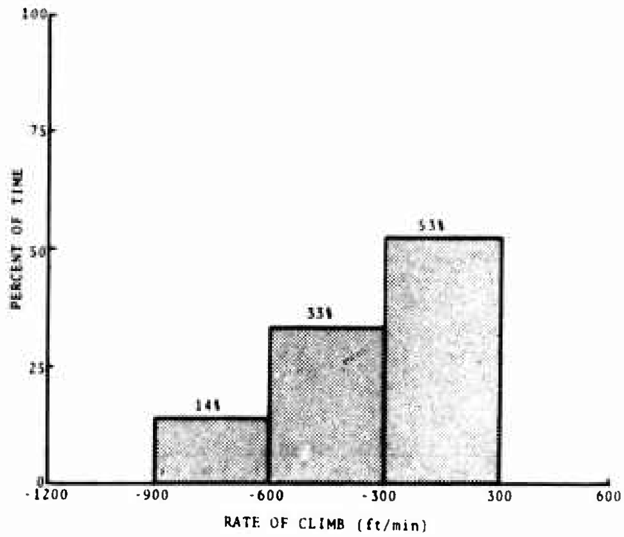
Figure 65.

Cumulative Engine Torque Frequency Distribution for Flare During Descent.



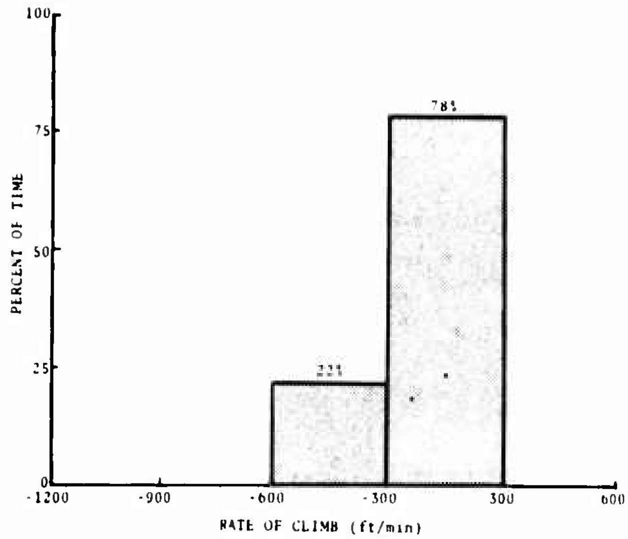


a) 6000 Lb. - 7000 Lb.

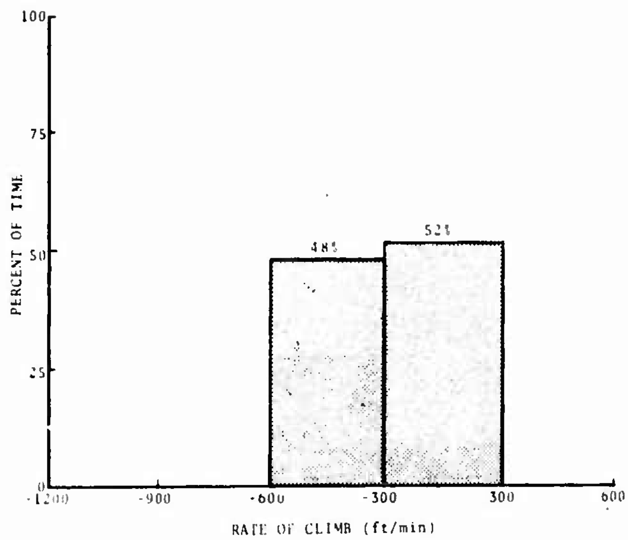


b) 7000 Lb. - 8000 Lb.

Figure 66. Percentage of Time Distributed in Rate of Climb for Flare by Gross Weight.



c) 8000 Lb. - 9000 Lb.



d) 9000 Lb. - 10000 Lb.

Figure 66 - Concluded.

During this survey, two flares occurred during the level flight mission segment. One of these flares occurred within the 7000- to 8000-pound gross weight range; the other, within the 8000- to 9000-pound range. In both instances, the change in altitude prior to the flare was negligible and the airspeed was low. Neither of these flares had an n_z peak outside the editing threshold. These data are listed in Tables LXXXII and CVIII of Appendix II.

Steady-State Conditions

The steady-state flight condition represents operation when airspeed, torque, rotor speed, and controls are steady or varying slightly about a steady mean. Steady-state conditions occurred in all mission segments and represented the most frequent flight condition by a large margin as depicted in Figure 41. These occurrences are discussed briefly in the following paragraphs.

During ground operations, 154 steady-state conditions occurred with a 1.4-minute average duration. Data for these operations are contained in Tables LXXXIII and CIX of Appendix II.

During the hover mission segment, 96 steady-state conditions occurred and lasted approximately 25 seconds on the average. Figure 67 presents the distribution of these conditions in gross weight ranges, and Figure 68 does the same in engine torque ranges. One percent of the time during the steady-state condition was spent above the engine torque limit of 50 psi. Approximately 36 percent of the steady-state operations occurred at rotor speeds above the normal operating limit of 324 rpm. No gust- or maneuver-induced n_z peaks were observed during this mission segment. One n_x peak of 0.10g was observed during steady state hovering and the data are presented in Table LXXXIX. Data for the steady-state conditions in hover are contained in Tables LXXXIII and CIX of Appendix II.

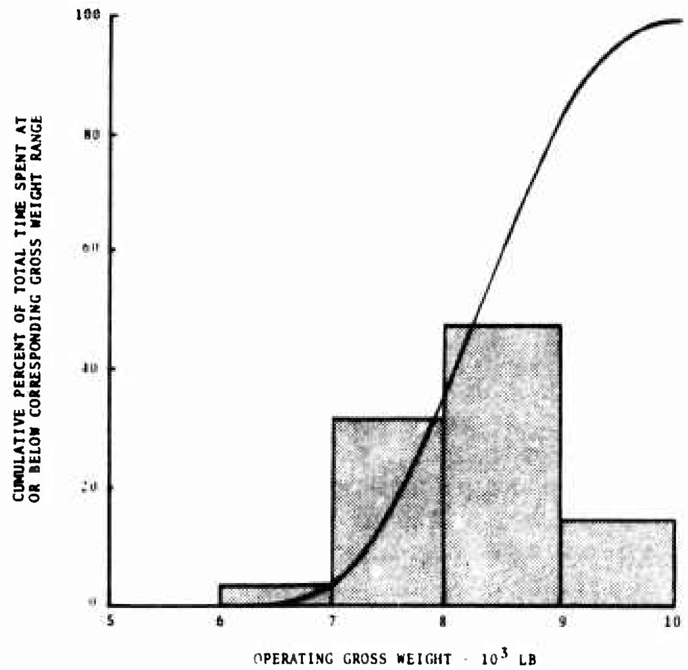


Figure 67. Cumulative Gross Weight Frequency Distribution for Steady-State Hover.

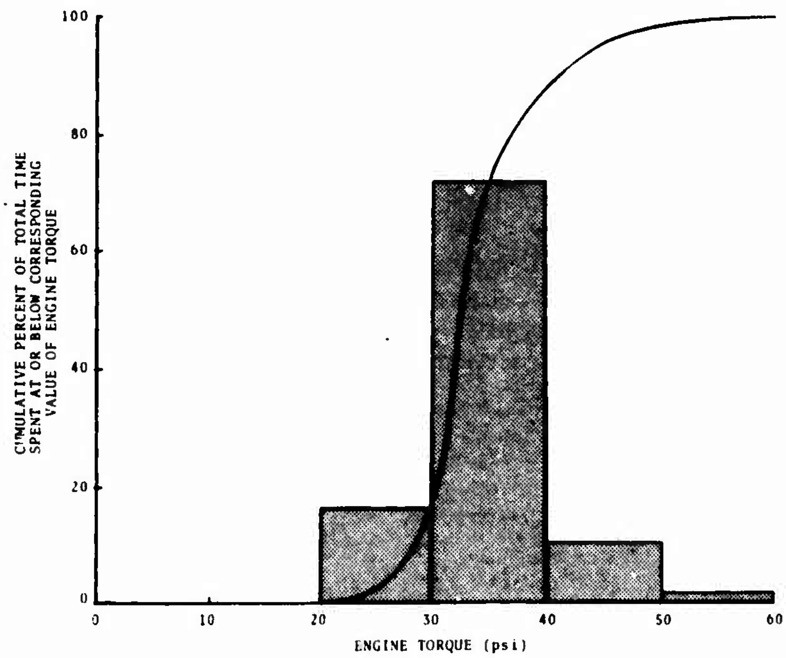


Figure 68. Cumulative Engine Torque Frequency Distribution for Steady-State Hover.

Within the ascent mission segment, 185 steady-state conditions occurred and lasted about 1.2 minutes on the average. From Figure 69, the time within the airspeed ranges from 60 to 100 knots was fairly evenly divided with a slight peak in the ranges of 85 and 90 knots. Figures 70 and 71 present the frequency distribution of time within ranges of gross weight and engine torque for the steady-state condition in the ascent mission segment. Once again, about one percent of the time was spent above the transmission torque limit. Approximately 36 percent of the steady-state operations occurred at rotor speeds above the normal operating limit. Figure 72 presents the frequency distribution for rate of climb; as can be seen, as gross weight increases, the amount of time spent at the higher ascent rates decreases. Fifty gust-induced normal n_z peaks occurred during steady-state operations in the ascent mission segment; they ranged from 0.4g to 1.3g and lasted a total of 34 seconds. Three n_y peaks of -0.10g were observed, one coincident with an n_z peak of 0.8g. Data for the steady-state operation in ascent are contained in Tables LXXXIII, XC, XCI, and CIX of Appendix II.

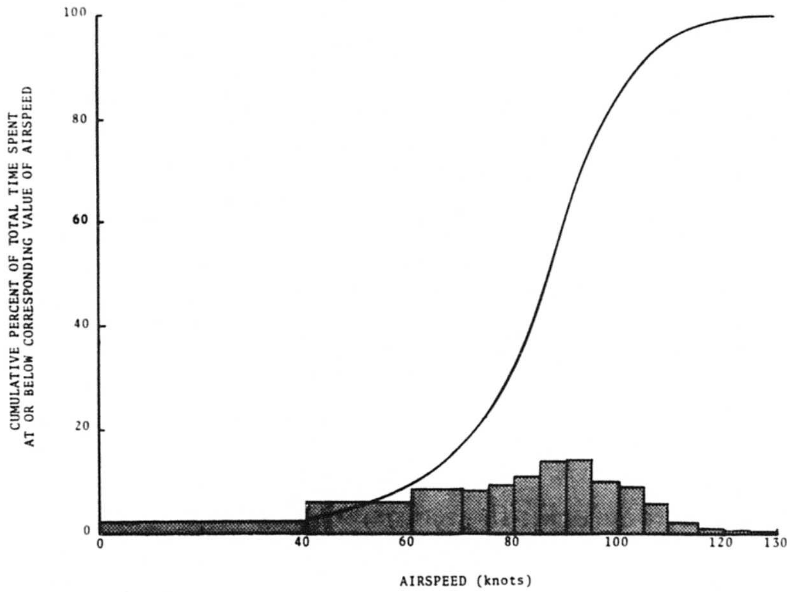


Figure 69. Cumulative Airspeed Frequency Distribution for Steady-State Ascent.

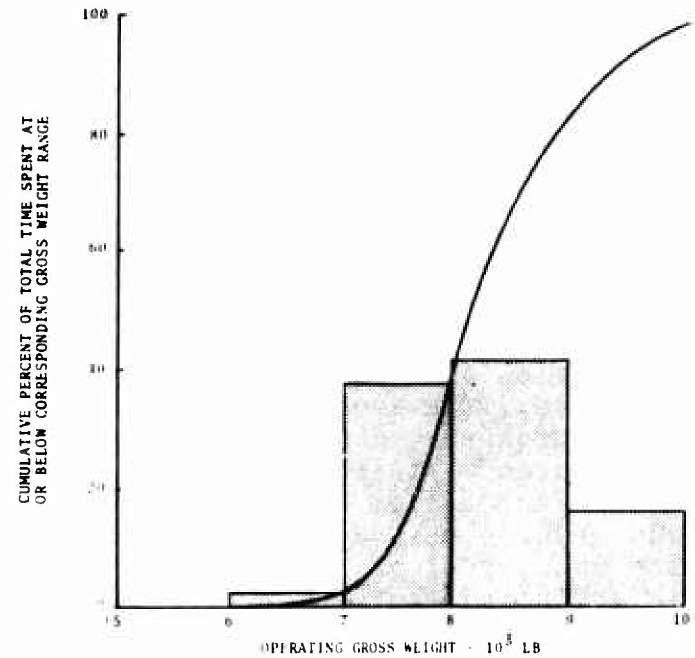


Figure 70. Cumulative Gross Weight Frequency Distribution for Steady-State Ascent.

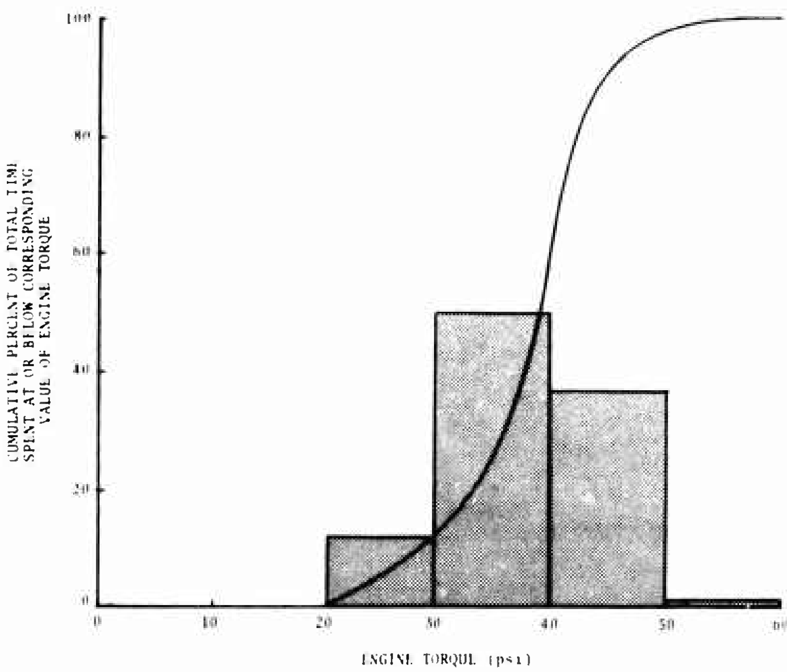


Figure 71. Cumulative Engine Torque Frequency Distribution for Steady-State Ascent.

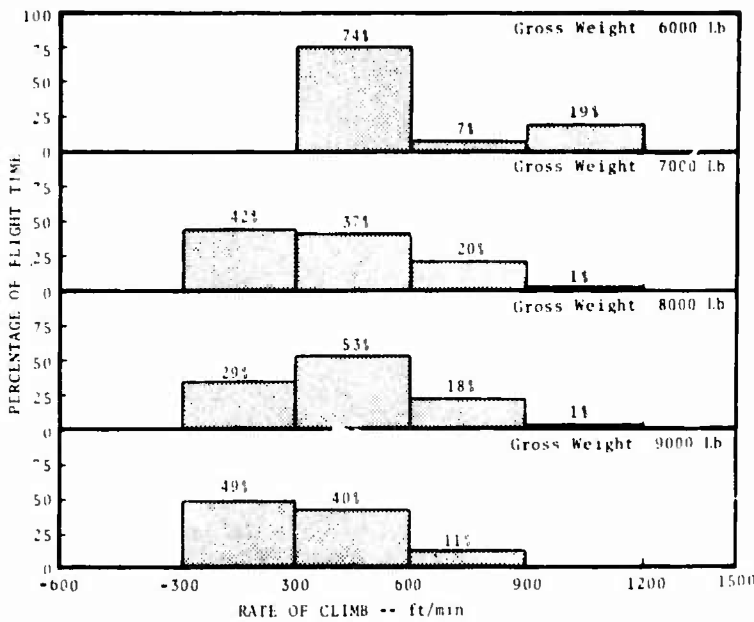


Figure 72. Percentage of Time Distributed in Rate of Climb for Steady State in Ascent by Gross Weight.

During the level flight mission segment, 444 steady-state conditions occurred; their average duration was 2.8 minutes. The frequency distribution for airspeed is presented in Figure 73; significant operations occurred at airspeeds between 80 and 119 knots. The gross weight frequency distribution for level flight steady-state operations is presented in Figure 74. Time within torque ranges is normally distributed about the 30-psi range as shown in Figure 75. Approximately 23 percent of the steady-state operations occurred at rotor speeds above the normal operating limit. Slight variations in the rate-of-climb data may be noted in Table LXXXIII of Appendix II, but these variations represent only about 0.1 percent of the time. During the level flight mission segment, 110 gust-induced vertical acceleration peaks occurred; they ranged from 0.6g to 1.3g and lasted a total of 63 seconds. Eleven n_y peaks ranging from -0.15g to 0.10g were observed; three of these peaks were coincident with gust-induced n_z peaks. Data for steady-state operation in level flight are contained in Tables LXXXIII, XC, XCI, and CIX of Appendix II.

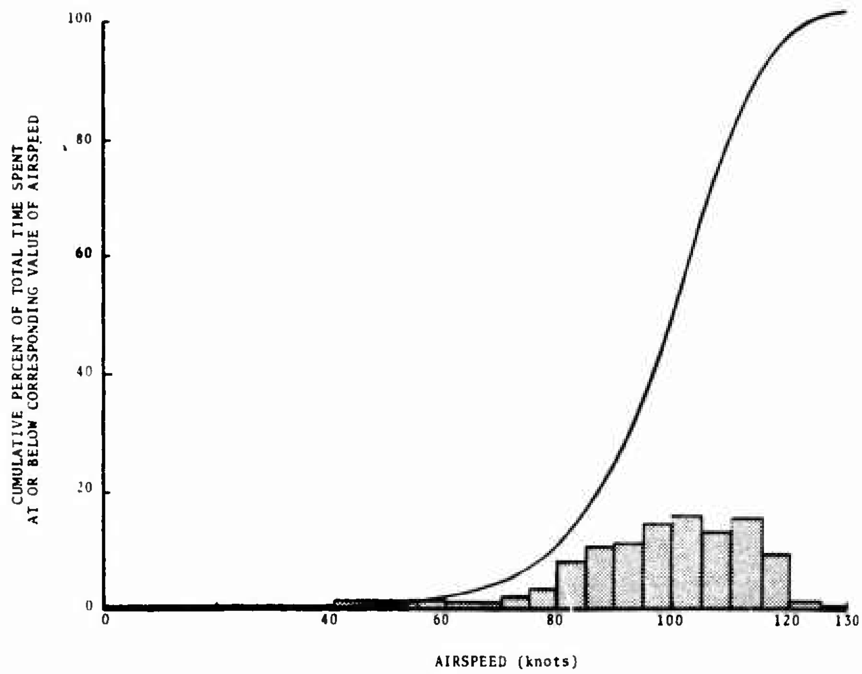


Figure 73. Cumulative Airspeed Frequency Distribution for Steady-State Level Flight.

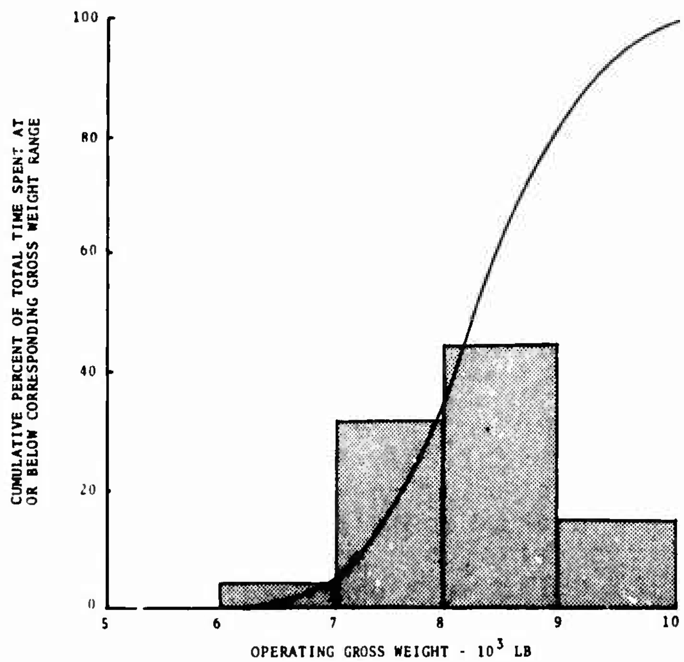


Figure 74. Cumulative Gross Weight Frequency Distribution for Steady-State Level Flight.

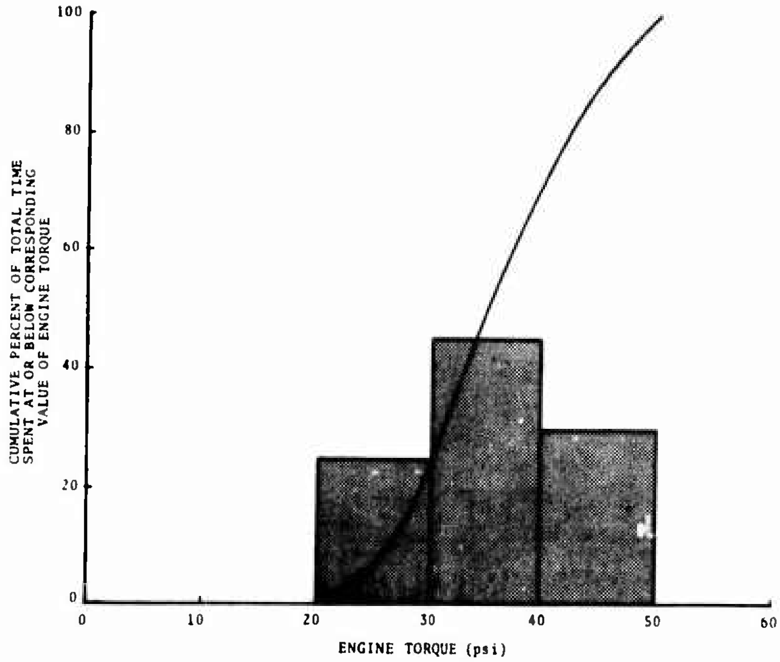


Figure 75. Cumulative Engine Torque Frequency Distribution for Steady-State Level Flight.

Within the descent mission segment, 207 steady-state conditions occurred, lasting about 44 seconds on the average. From Figure 76, the time within the airspeed ranges from 40 to 120 knots was fairly evenly divided; a slight peak occurred in the ranges of 95 to 100 and 100 to 105 knots. Figures 77 and 78 present the frequency distributions of time within ranges of gross weight and torque. Approximately 31 percent of the steady-state operations occurred at rotor speeds above the operating level. Figure 79 presents the frequency distribution for the rate of steady-state descents. While most of the time was spent in the ranges from -300 to -900 feet per minute, descents at rates as high as 2100 feet per minute were observed. Nineteen gust-induced n_z peaks occurred during the level flight mission segment; they ranged from 0.6g to 1.4g and lasted a total of 16 seconds. Seven n_y peaks ranging from -0.15g to 0.10g were observed; four of these peaks were coincident with gust-induced n_z peaks. Data for steady-state operation in descent are contained in Tables LXXXIII, XC, XCI, and CIX of Appendix II.

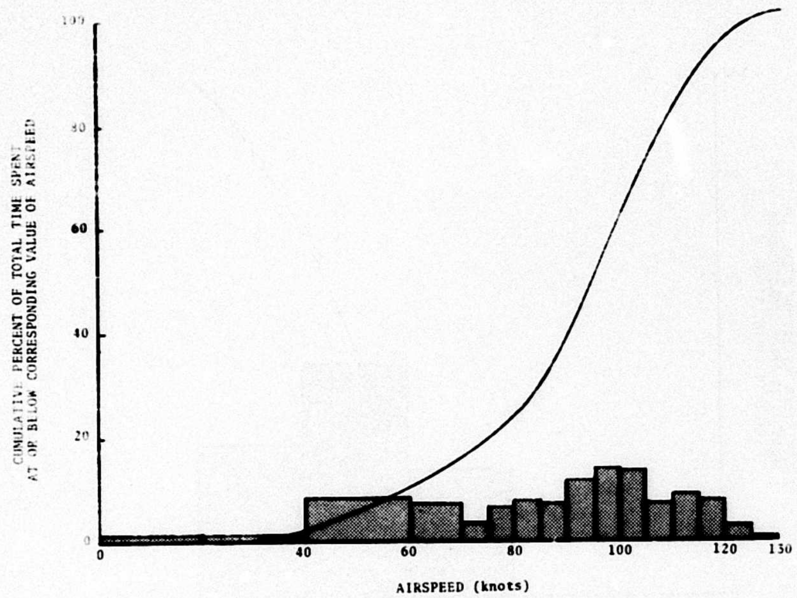


Figure 76. Cumulative Airspeed Frequency Distribution for Steady-State Descent.

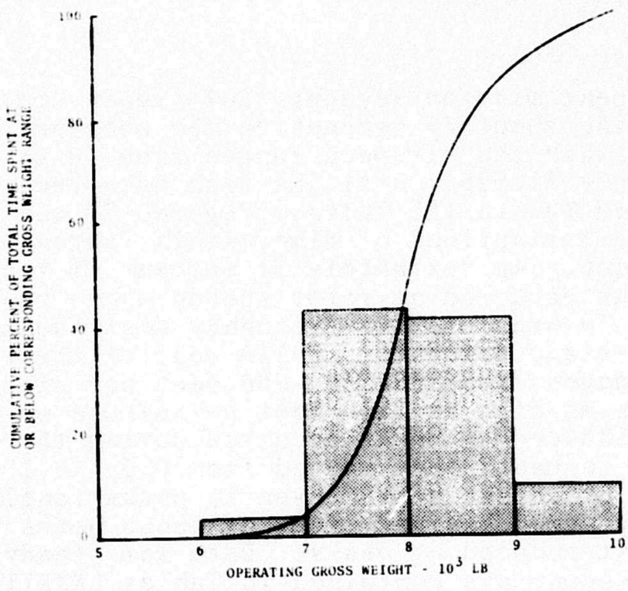


Figure 77. Cumulative Gross Weight Frequency Distribution for Steady-State Descent.

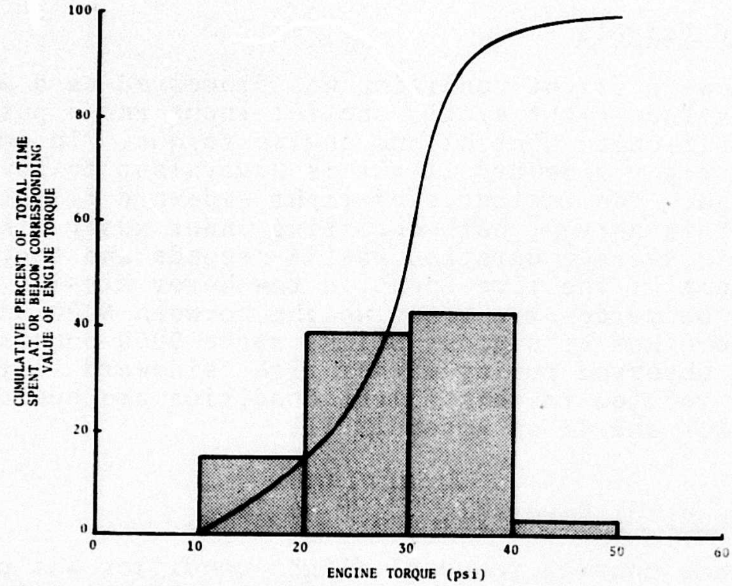


Figure 78. Cumulative Engine Torque Frequency Distribution for Steady-State Descent.

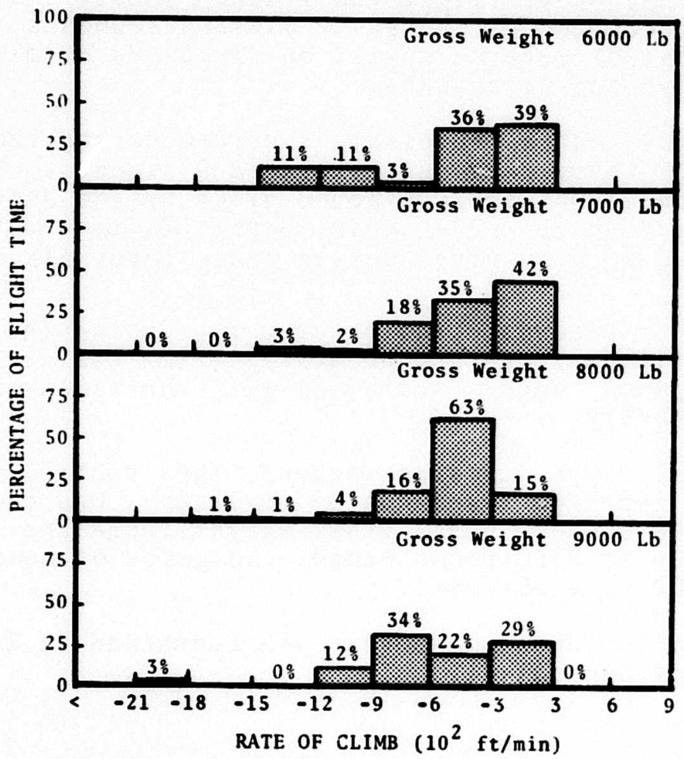


Figure 79. Percentage of Time Distributed in Rate of Climb for Steady-State Descent.

Right Sideward Flights

The right sideward flight condition was processed as a maneuver with a distinct right cyclic control input and a possible increase in collective control and engine torque. In operational usage, right sideward flight is equivalent to hovering in a cross wind. Two instances of right sideward flight were noted during this survey, both occurring under gusty wind conditions. Their average duration was 34 seconds and they represented 2 percent of the time spent in the hover mission segment. One condition occurred at a gross weight between 8000 and 9000 pounds and the other at a gross weight above 9000 pounds. No n_z peaks were observed during either right sideward flight condition. Data related to this flight condition are contained in Tables LXXXIV and CX of Appendix II.

Longitudinal Control Reversals

The longitudinal control reversal flight condition was processed as a maneuver which resulted from a movement of the longitudinal cyclic control greater than 10 percent of full deflection and not related to any other flight condition. Usually, such control reversals occurred during gusty mission segments. The nine longitudinal control reversals will be discussed by mission segment in the following paragraphs.

Four longitudinal control reversals occurred during the hover mission segment; these reversals averaged 9 seconds. Two occurred within the 7000- to 8000-pound gross weight range and two, within the 8000- to 9000-pound range. No gust- or maneuver-induced n_z peaks were observed during these reversals.

One reversal of 8 seconds duration occurred during the ascent mission segment; the gross weight at that time was within the 8000- to 9000-pound range. Again, no gust- or maneuver-induced n_z peaks were observed.

Within the level flight mission segment, four control reversals occurred; they averaged 8 seconds in duration. One occurred within the 6000- to 7000-pound gross weight range and three within the 8000- to 9000-pound range. No gust- or maneuver-induced n_z peaks were observed.

Data related to the above maneuvers are contained in Tables LXXXV and CXI of Appendix II.

Lateral Control Reversals

The lateral control reversal flight condition was processed as a maneuver which resulted from a movement of the lateral cyclic control greater than 10 percent of full deflection and not related directly to any other flight condition. Usually, such control reversals occurred during gusty mission segments. The eight lateral reversals will be discussed by mission segment in the following paragraphs.

Two lateral control reversals occurred during the hover mission segment and lasted approximately 7 seconds on the average. One occurred at a gross weight between 7000 and 8000 pounds and the other at a gross weight between 8000 and 9000 pounds. No gust- or maneuver-induced n_z peaks were observed during these reversals. However, one n_y peak of 0.10g was observed during the 8000- to 9000-pound lateral reversal.

Two lateral reversals also occurred during the ascent mission segment and lasted approximately 5 seconds on the average. One occurred at a gross weight between 7000 and 8000 pounds and the other at a gross weight above 9000 pounds. No gust- or maneuver-induced n_z peaks were observed during the reversals.

Within the level flight mission segment, three control reversals occurred; they averaged 8 seconds in duration. One occurred at a gross weight between 7000 and 8000 pounds and the other at a gross weight between 8000 and 9000 pounds. No gust- or maneuver-induced n_z peaks were observed during the reversals. One reversal of 13 seconds duration occurred during the descent mission segment; the gross weight at the time was above 9000 pounds. Again, no gust- or maneuver induced n_z peaks were observed. In editing this maneuver, consideration was given to identifying it as a left turn because of its duration and the lack of gusty conditions.

Data related to the above maneuvers are contained in Tables LXXXVI and CXII of Appendix II.

Transients

The transient flight condition occurred during ground operations when the torque and rotor rpm varied rapidly. In general, these periods were associated with the acceleration or deceleration of the rotor system. They occurred before takeoffs and after touchdowns. They also occurred between flights when the rotor system was slowed down; an example of transients is presented in Figure 80; there were 201 transients during the ground mission segment and 4 during the transition mission segment. Data related to these transients are contained in Tables LXXXVII and CXIII of Appendix II.

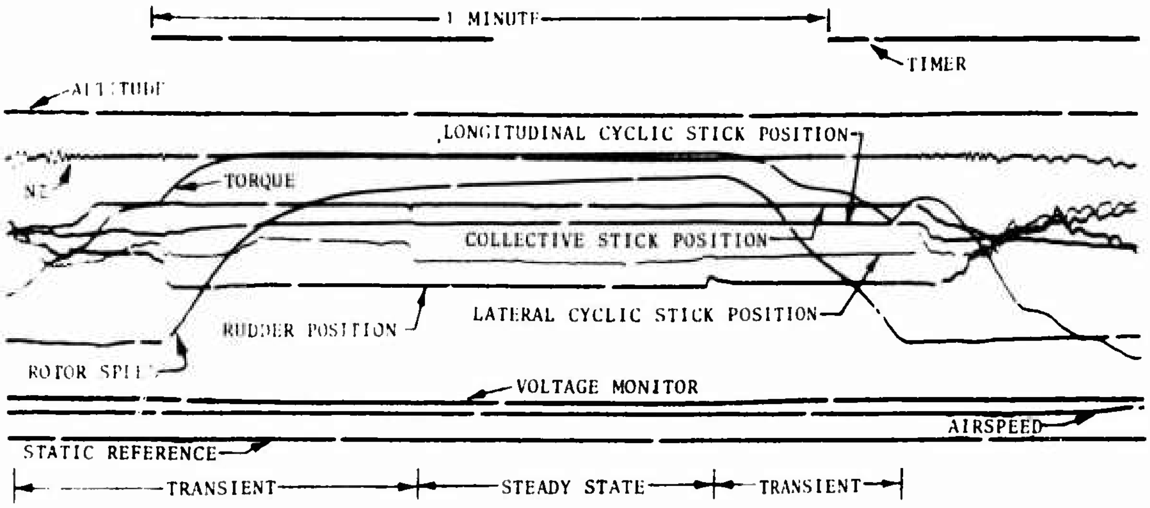


Figure 80. Oscillogram Showing Transient Condition Between Touchdown and Takeoff.

FCR DATA SUMMARY

The intent of the FCR technique is to provide better resolution of the operational usage data and to present these data in a manner which would be more understandable to a fatigue analyst. The foregoing presentations discussed each flight condition in detail, but no attempt was made to construct an operational usage spectrum similar to those presented in References 5 or 7, because it was beyond the scope of the present study. However, a few brief comparisons are presented in the following paragraphs so that portions of the Reference 7 fatigue spectrum and the FCR data may be qualitatively compared.

The first comparison is based on the seven mission segments used in this program. By apportioning the Reference 7 design spectrum among the seven segments, the spectrum may be compared with the FCR data as depicted in Figure 81. (The FCR data was previously presented in Figure 40.) As can be seen in Figure 81, little similarity exists between the two sets of data. The closest agreement is for the hover mission segment. More time was spent in the ascent and descent segments during this survey than the time allocated in the Reference 7 spectrum. The two ground conditions would agree more closely if the steady-state and ground taxi operations in the FCR data, accounting for 10 percent of the recorded time, were discounted. The remaining 3 percent of the time in Figure 81 was spent in transient rotor operation including rotor starts and stops. Eliminating those transients which did not represent complete starts and stops would bring the spectrum and FCR data in close agreement.

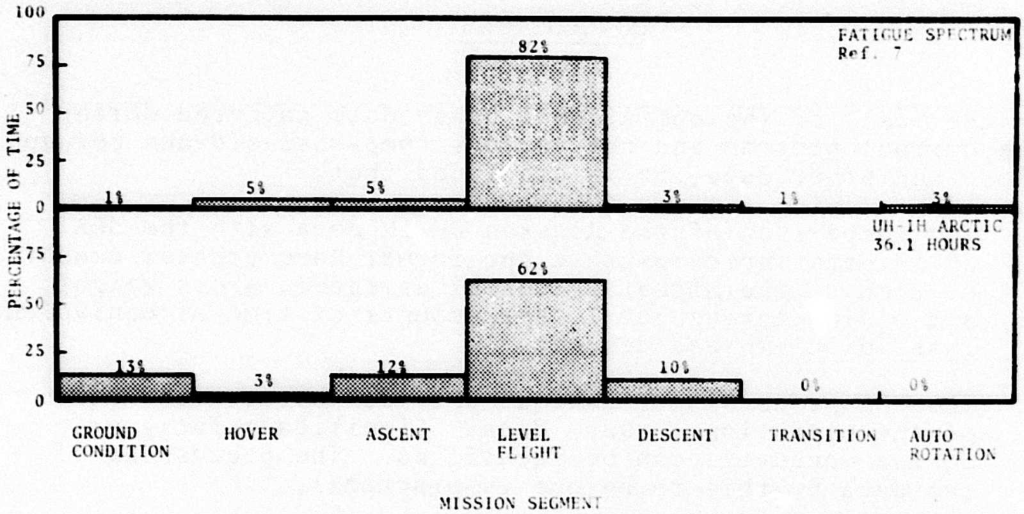


Figure 81. Comparison of Percentages of Time in Seven Mission Segments of FCR Data With Those of Reference 7 Fatigue Spectrum Data.

Four types of flight conditions--starts, touchdowns, turns, and pull-ups--are briefly compared as follows: During the survey, rotor starts occurred about once per hour while the design spectrum is based on the assumption of four starts per hour, a conservative assumption. The comparison of the distribution of touchdowns by gross weight for each spectrum shows that the design spectrum has more touchdowns occurring at higher gross weight landings. For the Reference 7 spectrum, the distribution of gross weight is 10 percent of the time at 6500 pounds, 30 percent at 7500 pounds, 45 percent at 8500 pounds, and 15 percent at 9500 pounds. During this survey, the distribution was 6 percent for the 6000- to 7000-pound range; 45 percent for the 7000- to 8000-pound range, 38 percent for the 8000- to 9000-pound range, and 11 percent for gross weights above 9000 pounds. With respect to maneuvers such as turns, close agreement exists since the design spectrum is based on the assumption that 2 percent of the time occurs in both left and right turns; during this survey, left turns occurred 3 percent of the time and right turns, 3.8 percent. With respect to collective and cyclic pull-ups in the FCR data, close agreement apparently exists since they occurred 0.4 and 0.3 percent of the time, respectively, versus 0.25 percent for each type of pull-up from the design spectrum. This close agreement is misleading since the pull-ups observed during the survey were very mild when compared with those used in Reference 7. Only 2 of 45 collective pull-ups and 5 of 29 cyclic pull-ups produced n_z peaks, none above 1.4g.

CONCLUSIONS

On the basis of the operational usage data gathered during the current program and the various comparisons drawn between these and other data, it is concluded that:

1. The comparison of the Alaskan UH-1H data with the SEA UH-1H data indicates that the former have greater amounts of time at the higher values of airspeed, gross weight, and engine torque but lesser amounts of time at equivalent rates of climb and descent.

2. The FCR processing technique provides better resolution of the operational usage data. Significant fatigue-damage maneuvers can be identified. The processing of the data by this technique is practical.

3. The maneuver-induced normal load factors and their duration have been better defined.

4. The FCR technique needs additional refinements such as the presentaticn of airspeed in terms of percentage of V_{ne} and adjusted for applicable V_{ne}-density altitude restrictions.

RECOMMENDATIONS

The following recommendations are based upon a study of the data presented in this report:

1. The number of mission segments should be limited to the following six: ground operation, hover, ascent, level flight, descent, and autorotation.

2. The prime aircraft manufacturer and the operational usage survey contractor should coordinate their efforts at the beginning of a survey to establish recorded parameters, parameter ranges, and presentation formats.

3. An operational mission profile should be developed from the FCR data presented herein and compared with the design mission profile to improve the structural design criteria for future Army helicopters.

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APPENDIX I
FOUR MISSION SEGMENT TABULAR DATA PRESENTATION

Tables XLII through LXXII present the 88 hours of operational data processed by the Four Mission Segment technique.

Two tabular formats present the flight time distributed among the coincident ranges of two or more parameters and the frequency of acceleration peaks and incremental boost tube load peaks distributed among the coincident ranges of other variables. All times shown were rounded to the nearest tenth of a minute. Since in each subtable the total under the time column was computed and then rounded, a total may not agree with the sum of the rounded times in each line. Times between 0 and 0.05 minute were printed as ".0", and times equal to zero were printed as "0.0". Tables having neither occurrences nor time were not printed. Table headings are arranged so that the first-mentioned variable refers to the horizontal ranges at the top of the table and the second-mentioned variable refers to the vertical ranges at the left of the table. Where a third or a fourth variable is given, it is followed by its range in the heading. As an example, the heading "MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 BY MISSION SEG. ASCENT" indicates the time spent in coincident ranges of altitude and airspeed at a weight between 6000 and 7000 pounds during the ascent mission segment. All printed range values are the lower limits.

TABLE XLII. TIME FOR ALTITUDE VERSUS AIRSPEED BY WEIGHT AND MISSION SEGMENT

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000, BY MISSION SEG. ASCENT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS		.7	2.0				2.8
40		.4	2.5				2.8
60	.2	1.4	2.2	.3			4.1
70		.2	2.1	.2			2.6
75		1.0	5.1	.6			6.6
80		2.1	7.5	.8			10.3
85		2.6	1.9	1.6			6.1
90		1.9	5.2	.3			7.4
95		.4	4.2	.5			5.1
100		[illegible]	4.3	.1			4.6
105		.3	4.0	.2			4.5
110			2.5	.3			2.8
115			.2	.1			.3
120			.1				.1
125							
SUM	.2	11.1	43.9	4.9			60.2

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000, BY MISSION SEG. MANUVR

	LESS	-6000	-3000	0	3000	6000	SUM
LESS			.8	.4			1.2
40			.1	.4			.5
60			.2	.4			.6
70			.3	.1			.4
75			.3	.4			.7
80			.1	.1			.2
85			.3	.1			.4
90			.8	1.3			2.0
95			.3	.2			.4
100			.2				.2
105			.1				.1
110							
SUM			3.3	3.4			6.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000, BY MISSION SEG. DESCNT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	.2	.3	3.7				4.2
40	.8	.3	5.5				6.7
60	.2	.8	3.4				4.4
70	.3	.1	2.1				2.4
75		1.3	5.3	.7			7.3
80	.4	4.2	5.6	1.2			11.4
85	.1	1.5	4.1	1.6			7.3
90	.2	.1	5.1	1.2	.3		6.9
95	.1	.7	3.9	1.8	.5		7.0
100	.3	.9	7.2	1.1	.4		9.8
105			4.0	.7			4.8
110		1.3	6.2	.1			7.6
115		1.4	1.9				3.2
120		.6	.1	.1			.8
125				.0			.0
SUM	2.6	13.5	58.2	8.6	1.2		84.0

TABLE XLII - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000. BY MISSION SEG. STEADY

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	.9	.9	15.2				16.9
40		3.9	.2				4.1
60		1.0	.2				1.2
70		.3	.9				1.2
75			4.2				4.2
80			9.1	.3			9.4
85			13.1	.9			13.9
90			24.7	8.1			32.8
95			38.4	16.8			55.2
100	1.4	5.5	41.2	15.1			63.2
105	3.4	3.9	17.8	4.5			29.5
110	4.4	.8	15.2	.6			20.9
115			15.3	.6			15.9
120			6.0				6.0
125							
SUM	10.1	16.2	201.3	46.8			274.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000. BY MISSION SEG. SUM

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	1.1	1.9	21.7	.4			25.0
40	.8	4.6	8.3	.4			14.1
60	.4	3.2	5.9	.7			10.3
70	.3	.6	5.4	.3			6.6
75		2.3	14.8	1.7			18.8
80	.4	6.3	22.3	2.4			31.4
85	.1	4.0	19.5	4.2			27.7
90	.2	2.0	35.8	10.9	.3		49.1
95	.1	1.1	46.8	19.2	.5		67.8
100	1.7	6.4	52.9	16.3	.4		77.8
105	3.4	4.2	25.8	5.4			38.8
110	4.4	2.1	23.9	1.0			31.4
115		1.4	17.4	.7			19.5
120		.6	6.2	.1			6.9
125				.0			.0
SUM	12.9	40.8	306.7	63.7	1.2		425.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000. BY MISSION SEG. ASCENT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	2.2	8.6	15.1	6.2			32.0
40	2.5	4.3	9.9	5.3	2.1	.1	24.1
60	.6	3.2	11.3	9.1	2.5	.3	26.9
70	1.6	1.6	7.2	8.1	1.1	.5	20.0
75	2.7	1.9	13.6	9.0	1.3	.3	28.7
80	1.1	5.7	23.9	11.1	1.8	.6	44.1
85	.7	6.9	32.5	12.6	1.1	.1	53.9
90	2.8	11.0	32.0	6.8	1.6	.2	54.3
95	2.1	9.6	36.9	14.6	1.5		64.8
100	1.3	8.8	22.0	5.8	4.2		42.2
105		5.1	21.7	2.8	1.7		31.3
110		3.9	11.5	3.2	.1		18.8
115		.3	7.3	2.0			9.6
120		.1	.6	.1			.7
125			.2				.2
SUM	17.5	70.9	245.7	96.6	19.0	2.0	451.7

TABLE XLII - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000. BY MISSION SEG. MANUVR

	LESS	-6000	-3000	0	3000	6000	SUM
LESS			1.5	.1			1.6
40		.7	1.4				2.0
60		.4	1.4	.3			2.1
70		.2	1.0	.6			1.8
75		.0	.8	.8			1.7
80		.1	.5	.5			1.1
85		.1	.8	1.1			2.0
90		.1	1.5	.9			2.4
95		.1	.8	.5			1.4
100		.0	.1	.2			.4
105		.2	.1				.3
110		.1	.3				.4
115							
SUM		2.1	10.1	5.1			17.2

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000. BY MISSION SEG. DESCNT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	2.9	8.5	14.5	4.2			30.1
40	3.9	10.9	17.4	5.5	.6		38.4
60	1.5	3.0	12.4	5.0	.8		22.8
70	.6	1.5	8.5	4.2	.1		14.9
75	1.4	2.0	8.4	4.0	.1	.1	16.0
80	.8	1.5	13.0	7.5	.7	.1	23.6
85	2.6	1.3	11.4	9.6	1.0	.1	26.1
90	1.8	2.6	18.1	6.6	2.8	.6	32.6
95	5.8	8.3	21.5	11.6	3.9	.4	51.4
100	1.2	8.2	20.5	14.3	2.1		46.3
105	.9	11.3	26.7	7.9	.7	2.4	50.0
110	.5	4.7	29.9	4.7	10.8	1.0	51.7
115	.1	7.8	17.6	11.4	12.0	.6	49.5
120		.3	4.9	1.2			6.5
125				.1			.1
SUM	23.9	72.1	225.0	97.8	35.8	5.4	460.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000. BY MISSION SEG. STEADY

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	9.9	14.7	40.1	15.1			79.9
40	.6	3.0	8.9	1.8			14.2
60	.1	3.9	8.5	1.8			14.3
70	1.0	.4	2.2	4.6			8.2
75	2.1		8.4	6.5			17.0
80	2.7	.1	26.3	20.0			49.1
85	7.5	2.3	28.1	44.3	1.2	.3	83.7
90	25.1	24.4	67.3	51.2	1.3	.6	169.9
95	8.5	42.8	177.4	50.2	14.1	1.2	294.1
100	11.3	26.0	145.1	29.0	18.4	.3	230.1
105	6.3	37.9	87.6	20.2	9.9	.9	162.8
110	2.1	22.8	40.3	16.7	20.2	1.0	103.1
115		17.3	20.6	6.6	4.0		48.5
120		.9	1.5	.6			3.0
125							
SUM	77.2	196.4	662.5	268.6	69.0	4.3	1278.0

TABLE XLII - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000. BY MISSION SEG. SUM

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	15.0	31.9	71.2	25.6			143.6
40	7.0	18.8	37.6	12.5	2.7	.1	78.7
60	2.2	10.6	33.6	16.2	3.3	.3	66.1
70	3.2	3.6	18.9	17.5	1.2	.5	44.9
75	6.2	3.9	31.4	20.3	1.5	.4	63.5
80	4.6	7.4	63.7	39.0	2.5	.7	117.9
85	10.8	10.6	72.8	67.8	3.3	.5	165.8
90	29.7	38.1	118.9	65.5	5.6	1.4	259.3
95	16.4	60.8	236.6	76.9	19.5	1.5	411.8
100	13.8	43.1	187.8	49.3	24.7	.3	318.9
105	7.2	54.5	136.2	30.9	12.3	3.3	244.4
110	2.6	31.6	82.0	24.6	31.2	2.0	174.0
115	.1	25.4	45.4	20.0	16.0	.6	107.6
120		1.3	7.0	2.0			10.2
125			.2	.1			.3
SUM	118.6	341.4	1143.2	468.2	123.9	11.7	2207.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000. BY MISSION SEG. ASCENT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	2.5	6.4	7.1	1.3			17.3
40	1.5	4.0	8.4	4.6			18.5
60	1.4	4.6	7.3	6.9			20.2
70	.2	3.1	6.5	5.3			15.1
75	.3	5.0	12.9	3.9			22.0
80	1.3	8.4	9.7	4.2	.2		23.7
85	.8	13.7	6.6	3.1	.8		24.9
90	2.2	14.9	9.9	3.8	2.6	1.5	34.8
95	1.8	23.8	12.4	4.2	8.4	1.2	51.8
100	1.0	11.9	8.3	1.0	3.1		25.3
105		10.1	3.0	.8	1.5		15.4
110		2.2	3.0	.1			5.4
115		.2	.1	.2			.5
120		.1		.2			.3
125		.1					.1
SUM	13.0	108.3	95.3	39.5	16.5	2.7	275.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000. BY MISSION SEG. MANUVR

	LESS	-6000	-3000	0	3000	6000	SUM
LESS		1.7	.1	1.1			2.8
40	.8	3.2	.8	1.3			6.1
60	.3	1.9	1.9	.8			4.9
70	.0	1.2	1.6	1.2			4.0
75	.3	.8	.4	1.5			3.0
80	.3	.7	1.5	.7			3.2
85	.3	.4	1.0	.7			2.5
90	.1	.2	1.2	.7			2.2
95		.9	2.1	.1			3.1
100		.2	1.6	.3			2.1
105		.1	.8	.7			1.6
110			.1	.8			1.0
115				.2			.2
120							
SUM	2.2	11.3	13.3	10.2			36.9

TABLE XLII - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000. BY MISSION SEG. DESCNT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	3.2	3.7	4.6	3.3			14.8
40	4.0	6.3	4.3	5.9			20.4
60	1.0	3.1	2.5	3.3			9.9
70	1.0	1.1	2.2	1.9			6.2
75	.4	2.5	3.3	3.4			9.5
80	.9	3.6	4.2	3.6			12.3
85	1.2	9.9	6.2	6.5			23.9
90	.9	15.7	11.5	7.2			35.2
95	3.0	20.1	12.3	9.6	.3		45.2
100	2.2	15.4	14.0	5.6	.7		38.0
105	1.2	8.0	12.2	1.6			23.1
110	.3	7.8	4.4	.4			12.9
115		1.5	.5	.1			2.1
120		.3	.1				.4
125							
SUM	19.2	99.2	82.2	52.3	1.0		253.9

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000. BY MISSION SEG. STEADY

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	11.7	18.6	33.7	6.9			70.8
40	2.7	1.2	1.0	1.0			6.0
60	2.1	2.3	2.0	3.8			10.2
70	.4	2.6	4.3	8.1			15.4
75	1.6	5.6	8.8	16.5			32.6
80	1.4	13.9	24.2	42.9			82.4
85	3.6	25.5	53.7	70.8			153.7
90	4.5	44.0	85.2	42.7	1.6	.7	178.6
95	10.8	52.6	139.1	62.6	1.7	3.5	270.2
100	.2	107.1	153.4	30.7	3.6	10.5	305.4
105	.3	93.4	64.2	7.0	.6	5.8	171.4
110		56.3	23.7	.6		.9	81.7
115		23.4	22.0				45.4
120		4.6					4.6
125							
SUM	39.4	451.2	615.1	293.8	7.4	21.4	1428.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000. BY MISSION SEG. SUM

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	17.4	30.4	45.5	12.5			105.7
40	9.0	14.7	14.5	12.8			51.0
60	4.8	12.0	13.7	14.7			45.2
70	1.7	8.0	14.6	16.4			40.6
75	2.6	13.9	25.4	25.4			67.2
80	3.8	26.6	39.7	51.4	.2		121.6
85	6.0	49.6	67.5	81.1	.8		205.0
90	7.6	74.8	107.7	54.4	4.1	2.2	250.9
95	15.5	97.4	165.9	76.5	10.3	4.7	370.4
100	3.4	134.6	177.3	37.6	7.4	10.5	370.8
105	1.6	111.6	80.2	10.2	2.2	5.8	211.5
110	.3	66.3	31.3	2.1		.9	100.9
115		25.1	22.6	.5			48.2
120		5.0	.1	.2			5.3
125		.1					.1
SUM	73.7	670.0	805.9	395.8	25.0	24.1	1994.6

TABLE XLII - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000, BY MISSION SEG. ASCENT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	3.1	3.1	4.3	.3			10.8
40	2.0	2.4	4.6	.1			9.1
60	2.3	2.1	3.3	.1			7.8
70	2.1	2.6	3.3				8.0
75	2.1	6.4	2.1	3.4			14.0
80	5.3	10.5	9.7	1.1			26.6
85	2.1	13.6	12.1	3.5			31.4
90	1.5	5.9	15.2	4.3			26.9
95	2.1	.9	.4	2.3			5.8
100	1.7	1.2	.1	1.0			4.1
105	1.6	.4					2.0
110							
SUM	25.9	49.1	55.1	16.2			146.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000, BY MISSION SEG. MANUVR

	LESS	-6000	-3000	0	3000	6000	SUM
60							
70	.0						.0
75	.1						.1
80	.1						.1
85	.2						.2
90							
SUM	.5						.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000, BY MISSION SEG. DESCNT

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	.6	1.0	2.2	.3			4.1
40	1.6	.4	4.0	.3			6.2
60	.7	.1	1.6	.7			3.2
70	.0	.2	.9	.4			1.6
75	.4	.5	1.5	.3			2.7
80	.9	2.9	1.3	9.0			14.2
85	.8	2.3	1.3	11.3			15.7
90	1.2	6.4	5.1				12.6
95	.1	3.9	4.0	4.2			12.2
100	.1	2.8	5.0	6.7			14.6
105	.2	.6	4.8				5.5
110	.3	1.9	.4				2.7
115	.6	1.8	.1				2.5
120	.3	.3					.6
125							
SUM	7.9	25.1	32.2	33.2			98.4

TABLE XLII - Concluded

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000. BY MISSION SEG. STEADY

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	5.5	3.6	4.0				13.0
40		.2	1.9				2.1
60	1.3	.5	3.6				5.3
70		.3	6.4				6.7
75	.4	.4	8.6	1.8			11.1
80	3.1	1.3	9.0	11.8			25.2
85	4.9	5.7	23.5	34.9			69.1
90	1.5	16.3	19.7	23.6			61.1
95	.6	7.2	31.8	4.7			44.3
100	.9	9.5	64.1	3.0			77.6
105	6.8	14.9	10.8	1.9			34.4
110	22.9	38.2	1.4				62.5
115	6.3	15.8					22.1
120	.3	.7					.9
125							
SUM	54.4	114.6	184.9	81.6			435.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000. BY MISSION SEG. SUM

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	9.2	7.7	10.4	.6			27.9
40	3.6	3.0	10.5	.4			17.4
60	4.2	2.8	8.5	.8			16.3
70	2.2	3.1	10.6	.4			16.4
75	3.1	7.3	12.1	5.5			28.0
80	9.4	14.7	20.1	21.9			66.0
85	8.0	21.6	37.0	49.7			116.3
90	4.1	28.5	40.0	27.9			100.6
95	2.8	12.1	36.3	11.2			62.4
100	2.8	13.5	69.3	10.7			96.3
105	8.5	15.9	15.6	1.9			41.8
110	23.2	40.2	1.8				65.2
115	7.0	17.6	.1				24.7
120	.6	.9					1.5
125							
SUM	88.6	188.9	272.2	131.1			680.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT SUM. BY MISSION SEG. SUM

	LESS	-6000	-3000	0	3000	6000	SUM
LESS	42.7	71.8	148.8	39.1			302.3
40	20.4	41.1	70.8	26.1	2.7	.1	161.2
60	11.5	28.6	61.8	32.5	3.3	.3	137.9
70	7.4	15.3	49.4	34.7	1.2	.5	108.5
75	11.8	27.4	83.6	52.8	1.5	.4	177.5
80	18.2	55.0	145.7	114.6	2.7	.7	336.9
85	24.8	85.8	196.8	202.7	4.1	.5	514.8
90	41.6	143.4	302.4	158.8	10.1	3.6	659.9
95	34.8	171.4	485.7	183.9	30.3	6.2	912.3
100	21.8	197.6	487.3	113.9	32.5	10.8	863.8
105	20.7	186.2	257.8	48.3	14.5	9.1	536.6
110	30.6	140.1	139.0	27.8	31.2	2.9	371.5
115	7.1	69.4	85.5	21.3	16.0	.6	200.0
120	.6	7.9	13.2	2.2			24.0
125		.1	.2	.2			.4
SUM	293.8	1241.1	2528.0	1058.8	150.1	35.8	5307.6

TABLE XLIII. TIME FOR LONGITUDINAL CYCLIC BOOST TUBE STEADY LOAD VERSUS COLLECTIVE BOOST TUBE STEADY LOAD BY MISSION SEGMENT

MINUTES FOR CY-LNG VS COLL. BY MISS. ASCENT

	LESS	-450	-400	-350	-400	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-350																		
-300									.0									.0
-250									.7			.2						.9
-200									16.4	4.4	6.5	7.1	.1					34.6
-150							.1	.1	35.0	27.9	23.4	12.7	.1					99.4
-100								.4	266.0	171.0	90.9	16.2	1.0					545.5
100									1.0	1.2	2.4	.4						4.9
150									.4	1.0								1.6
200										.1								.1
250																		
SUM							.1	.5	319.5	205.6	123.2	36.6	1.2					686.7

MINUTES FOR CY-LNG VS COLL. BY MISS. MANUVR

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250										.1								.1
-200										.6								.6
-150									.9	1.3	.1							2.2
-100									11.6	11.3	5.8	3.2	.3	.3				32.5
100									1.2	.2	.9	.2						2.5
150									1.0	.4	.2							1.6
200									1.0	.3								1.3
250									.2	.1								.3
300									.6	.2								.8
350									.1									.1
400									.7	.1								.8
450									.1									.1
SUM									17.6	14.6	7.0	3.5	.3	.3				42.9

MINUTES FOR CY-LNG VS COLL. BY MISS. DESCNT

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250									3.6			.1						3.7
-200									8.0	2.5	1.8	1.8						14.1
-150									17.5	11.2	29.2	21.2						79.1
-100								.3	228.4	132.7	53.9	18.2	.1					433.5
100									39.8	16.3	11.8	.7	.6					69.2
150									18.7	11.6	4.1	1.2	.1					35.6
200									7.7	4.7	1.1	.2	.1					13.9
250									2.8	1.8	.7	.5						5.9
300										.3	.2							.5
350										.5	.1							.6
400																		
SUM								.3	326.5	181.5	102.9	43.9	.9					656.1

MINUTES FOR CY-LNG VS COLL. BY MISS. STEADY

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250									3.7			4.0						7.7
-200									66.8	7.3	13.8	10.0						97.9
-150								.4	155.8	115.7	89.8	12.6						374.3
-100								4.4	934.6	747.3	296.7	63.9	.4					2047.3
100									7.2	13.7	9.8	.2	.1					31.1
150									.5	4.7	2.3	.3						7.8
200										1.5								1.5
250																		
SUM								4.8	1168.7	890.1	412.4	91.0	.4					2567.5

MINUTES FOR CY-LNG VS COLL. BY MISS. SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-350																		
-300									.0									.0
-250									8.0	.1		4.3						12.3
-200									91.2	14.7	22.1	18.9	.1					147.0
-150							.1	.5	209.2	156.0	142.6	46.5	.1					555.0
-100								5.1	1440.7	1062.3	447.4	101.5	1.7	.3				3058.9
100									49.1	31.3	24.9	1.6	.7					107.6
150									20.7	17.7	6.5	1.5	.1					46.4
200									8.7	6.7	1.1	.2	.1					16.8
250									3.0	1.9	.7	.5						6.1
300									.6	.5	.2							1.3
350									.1	.5	.1							.7
400									.7	.1								.8
450									.1									.1
SUM							.1	5.6	1832.1	1291.7	645.6	175.0	2.9	.3				3953.2

TABLE XLIV. TIME FOR LATERAL CYCLIC BOOST TUBE STEADY LOAD VERSUS COLLECTIVE BOOST TUBE STEADY LOAD BY MISSION SEGMENT

MINUTES FOR CY-LAT VS COLL. BY MISS. ASCENT

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-350																		
-300									.0									.0
-250									.9									.9
-200									27.5	1.4	3.5	2.0						34.4
-150								1.1	66.3	7.1	21.1	3.8						99.4
-100								.9	446.6	79.1	18.2	.7						545.5
100									4.7	.2								4.9
150									1.4									1.4
200									.1									.1
250																		
SUM								2.1	547.6	87.7	42.7	6.5						686.7

MINUTES FOR CY-LAT VS COLL. BY MISS. MANUVR

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250										.1								.1
-200									.6									.6
-150									1.9	.3								2.2
-100									30.1	2.3	.1							32.5
100									2.5									2.5
150									1.6									1.6
200									1.3									1.3
250									.3									.3
400									.8									.8
350									.1									.1
400									.6	.2								.8
450									.1									.1
SUM									39.9	2.9	.1							42.9

MINUTES FOR CY-LAT VS COLL. BY MISS. DESCNT

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250									3.7									3.7
-200									13.0	.8	.4							14.1
-150								1.2	60.3	16.1	1.3	.3						79.1
-100							.1	5.1	391.9	34.9	.3	1.2						433.5
100								1.8	66.9	.5								69.2
150								.5	35.1									35.6
200									13.9									13.9
250									5.9									5.9
300									.5									.5
350									.6									.6
400																		
SUM							.1	8.5	591.7	52.2	2.0	1.5						656.1

MINUTES FOR CY-LAT VS COLL. BY MISS. STEADY

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-300																		
-250									7.7									7.7
-200									60.7	25.0	12.1	.2						97.9
-150									207.9	108.1	54.9	3.4						374.3
-100							.1	2.5	1742.4	273.6	28.7							2047.3
100									30.4	.7								31.1
150									7.8									7.8
200									1.5									1.5
250																		
SUM							.1	2.5	2058.3	407.4	95.7	3.6						2567.5

MINUTES FOR CY-LAT VS COLL. BY MISS. SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-350																		
-300									.0									.0
-250									12.2	.1								12.3
-200									101.7	27.2	15.9	2.2						147.0
-150								2.3	336.4	131.5	77.3	7.4						555.0
-100							.2	8.5	2611.0	389.9	47.3	1.9						3058.9
100								1.8	104.5	1.3								107.6
150								.5	45.9									46.4
200									16.8									16.8
250									6.1									6.1
300									1.3									1.3
350									.7									.7
400									.6	.2								.8
450									.1									.1
SUM							.2	13.1	3237.6	550.2	140.5	11.6						3953.2

TABLE XLV. TIME FOR C_T/σ VERSUS μ BY RATE OF CLIMB AND MISSION SEGMENT

MINUTES FOR CT/S VS MU BY RATE OF CLIMB LESS, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.2			.2
0.15			.7	.1		.8
0.20						
SUM			.8	.1		.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB LESS, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.0			.0
0.15			.1	.1		.3
0.20				.2		.2
0.25						
SUM			.2	.3		.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB LESS, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.2			.2
0.15			.8	.2		1.0
0.20				.2		.2
0.25						
SUM			1.0	.4		1.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -2100, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05				.1		.1
0.10			.1			.1
0.15			.1	.2		.4
0.20						
SUM			.2	.3		.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -2100, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15			.2			.2
0.20			.3	.4		.7
0.25						
SUM			.5	.4		.9

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -2100, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05				.1		.1
0.10			.1			.1
0.15			.3	.2		.5
0.20			.3	.4		.7
0.25						
SUM			.7	.7		1.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15			.2	.2		.3
0.20						
SUM			.2	.2		.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.8			.8
0.15			.7	.5		1.2
0.20			.4	.8		1.2
0.25			.2			.2
0.30						
SUM			2.1	1.2		3.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.8			.8
0.15			.9	.6		1.5
0.20			.4	.8		1.2
0.25			.2			.2
0.30						
SUM			2.3	1.4		3.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05			.1			.1
0.10			.2	.1		.3
0.15			.3	.1		.4
0.20			.2	.1		.3
0.25						
SUM			.8	.3		1.0

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.2			.2
0.05			.1			.1
0.10			.6	.4		1.0
0.15			2.5	1.1		3.7
0.20			1.8	1.8		3.6
0.25			.3	.3		.5
0.30						
SUM			5.5	3.5		9.0

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.2			.2
0.05			.2			.2
0.10			.8	.4		1.3
0.15			2.8	1.2		4.1
0.20			2.0	1.9		3.9
0.25			.3	.3		.5
0.30						
SUM			6.3	3.8		10.1

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05			.1			.1
0.10			.3			.3
0.15			.1	.1		.2
0.20			.1			.1
0.25						
SUM			.6	.1		.7

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.4			.4
0.05			.5			.5
0.10			2.4	.3		2.8
0.15			6.8	4.0		10.9
0.20			5.5	4.5		9.9
0.25			.3			.3
0.30						
SUM			15.9	8.9		24.8

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.4			.4
0.05			.6			.6
0.10			2.8	.3		3.1
0.15			6.9	4.1		11.1
0.20			5.6	4.5		10.1
0.25			.3			.3
0.30						
SUM			16.6	9.0		25.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15				.1		.1
0.20			.1			.1
0.25						
SUM			.1	.1		.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05			.1			.1
0.10			.3	.2		.5
0.15			.7	1.0		1.8
0.20				.2		.2
0.25						
SUM			1.1	1.4		2.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.9	.4		1.3
0.05			2.6			2.6
0.10			5.1	1.6		6.8
0.15			15.2	6.1		21.3
0.20			22.2	11.7		33.9
0.25			.9			.9
0.30						
SUM			46.9	19.8		66.7

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900. BY MISSION SEG. STEADY

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.2			.2
0.15						
0.20			1.0	.3		1.4
0.25						
SUM			1.2	.3		1.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.9	.4		1.3
0.05			2.7			2.7
0.10			5.7	1.8		7.4
0.15			15.9	7.3		23.2
0.20			23.3	12.2		35.5
0.25			.9			.9
0.30						
SUM			49.3	21.7		71.0

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			1.0	.2		1.2
0.05			.3	.1		.4
0.10			.2	.3		.4
0.15			2.2	.8		3.0
0.20			2.8	.9		3.7
0.25			.3			.3
0.30						
SUM			6.7	2.2		8.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600. BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.1			.1
0.05			.1	.6		.7
0.10			1.4			1.4
0.15			2.0	.1		2.2
0.20			.6	.4		1.0
0.25						
SUM			4.2	1.2		5.4

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600. BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.8	1.5		2.4
0.05			4.9	3.0		7.9
0.10			13.6	6.5		20.1
0.15			41.2	13.9		55.1
0.20			53.2	22.2	.4	75.7
0.25			2.0	5.1		7.0
0.30						
SUM			115.7	52.2	.4	168.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600. BY MISSION SEG. STEADY

	LESS	0.C2	0.04	0.06	0.08	SUM
LESS			1.3	.2	.1	1.5
0.05			1.3	.2		1.5
0.10			1.0	.4		1.4
0.15			7.5	7.0		14.5
0.20			14.5	11.2	.9	26.6
0.25			1.3	.6		1.9
0.30						
SUM			26.9	19.5	1.0	47.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			3.2	1.9	.1	5.2
0.05			6.6	3.8		10.5
0.10			16.1	7.2		23.3
0.15			52.9	21.8		74.8
0.20			71.0	34.7	1.3	107.0
0.25			3.5	5.6		9.1
0.30						
SUM			153.4	75.0	1.4	229.8

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			7.1	3.6		10.7
0.05			12.8	2.9		15.6
0.10			15.6	12.1		27.8
0.15			108.9	38.9		147.8
0.20			111.5	47.4	4.4	163.3
0.25			2.4	.4		2.7
0.30						
SUM			258.2	105.3	4.4	367.9

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.2			.2
0.05			1.3	.8	.1	2.2
0.10			5.2	1.3		6.4
0.15			5.6	2.3		8.0
0.20			2.8	1.9		4.6
0.25						
SUM			15.1	6.2	.1	21.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			5.5	3.5		9.0
0.05			19.5	3.8		23.3
0.10			22.7	7.4		30.1
0.15			66.0	31.0		97.0
0.20			113.9	54.0	2.1	170.0
0.25			13.6	12.2	.3	26.1
0.30						
SUM			241.3	111.8	2.4	355.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. STEADY

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			45.9	12.7		58.6
0.05			29.3	4.1		33.4
0.10			18.7	17.1		35.8
0.15			341.9	330.7		672.6
0.20			699.8	548.6	21.8	1270.2
0.25			18.1	18.6		36.8
0.30						
SUM			1153.7	931.9	21.8	2107.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			58.6	19.9		78.5
0.05			62.9	11.5	.1	74.5
0.10			62.2	37.9		100.0
0.15			522.4	403.0		925.4
0.20			928.0	651.9	28.3	1608.2
0.25			34.2	31.2	.3	65.6
0.30						
SUM			1668.3	1155.2	28.7	2852.2

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			1.6	2.2		3.7
0.05			7.6	4.5		12.0
0.10			15.6	13.8		29.4
0.15			69.7	31.4		101.1
0.20			32.1	11.0	1.5	44.5
0.25			.2	.3		.5
0.30						
SUM			126.8	63.1	1.5	191.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300. BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.2			.2
0.05			.8	.3	.1	1.2
0.10			.9	.8		1.7
0.15			1.8	.6		2.4
0.20			.1	.2		.3
0.25						
SUM			3.8	1.9	.1	5.8

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300. BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.5	.2		.7
0.05			1.3	.2		1.5
0.10			1.0	.3		1.3
0.15			2.5	.6		3.1
0.20			3.4	1.2		4.6
0.25			.3	.3		.6
0.30						
SUM			9.0	2.8		11.8

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300. BY MISSION SEG. STEADY

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.9	.1		1.0
0.05			1.0	.2		1.2
0.10			1.4	.8		2.2
0.15			7.2	9.6		16.8
0.20			12.8	15.2	.6	28.6
0.25			.4	.4		.8
0.30						
SUM			23.8	26.2	.6	50.5

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			3.2	2.4		5.6
0.05			10.7	5.1	.1	16.0
0.10			19.0	15.7		34.6
0.15			81.2	42.3		123.4
0.20			48.4	27.5	2.0	78.0
0.25			.9	.9		1.8
0.30						
SUM			163.4	93.9	2.1	259.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 600. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.8	.5		1.3
0.05			4.7	2.4		7.0
0.10			10.2	8.7		18.8
0.15			24.6	12.4		37.0
0.20			10.8	1.6		12.4
0.25			.1	.1		.2
0.30						
SUM			51.1	25.6		76.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 600. BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05			.2	.1		.3
0.10			.7	.5		1.2
0.15			.6	.5		1.1
0.20			.3			.3
0.25						
SUM			1.9	1.0		2.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 600. BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.1			.1
0.05						
0.10						
0.15						
0.20			.2	.2		.4
0.25						
SUM			.3	.2		.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 600. BY MISSION SEG. STEADY

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.1			.1
0.05						
0.10						
0.15			.2	.3		.4
0.20			.6	.2		.9
0.25						
SUM			.9	.5		1.4

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 600. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			1.0	.5		1.5
0.05			4.9	2.4		7.3
0.10			10.9	9.1		20.1
0.15			25.3	13.2		38.5
0.20			11.9	2.0		13.8
0.25			.1	.1		.2
0.30						
SUM			54.1	27.3		81.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 900. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.3	.3		.6
0.05			2.1	.5		2.6
0.10			2.0	3.9		5.9
0.15			5.9	4.2		10.2
0.20			3.6	.8		4.4
0.25			.4			.4
0.30						
SUM			14.4	9.6		24.1

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 900. BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.2			.2
0.15			.5			.5
0.20						
SUM			.6			.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 900. BY MISSION SEG. DESCNT

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15			.1			.1
0.20			.1			.1
0.25						
SUM			.2			.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 900. BY MISSION SEG. STEADY

	LESS	0.02	0.04	0.06	0.08	SUM
LESS				.1		.1
0.05						
0.10						
0.15						
0.20			.2			.2
0.25						
SUM			.2	.1		.3

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 900. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.3	.3		.7
0.05			2.1	.5		2.6
0.10			2.2	3.9		6.1
0.15			6.5	4.2		10.7
0.20			3.9	.8		4.6
0.25			.4			.4
0.30						
SUM			15.4	9.7		25.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1200. BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.1	.1		.2
0.05			.5	.1		.6
0.10			.8	.3		1.1
0.15			1.7	.7		2.4
0.20			.8	.2		.9
0.25						
SUM			3.8	1.4		5.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1200. BY MISSION SEG. MANUVR

	LESS	0.02	0.04	0.06	0.08	SUM
LESS						
0.05				.1		.1
0.10			.0			.0
0.15			.1			.1
0.20						
SUM			.2	.1		.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1200. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			.1	.1		.2
0.05			.5	.2		.7
0.10			.8	.3		1.1
0.15			1.8	.7		2.5
0.20			.8	.2		.9
0.25						
SUM			4.0	1.4		5.5

TABLE XLV - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1500, BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.3	.2		.5
0.15			.1	.0		.1
0.20			.3	.1		.4
0.25						
SUM			.6	.4		1.0

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1500, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10			.3	.2		.5
0.15			.1	.0		.1
0.20			.3	.1		.4
0.25						
SUM			.6	.4		1.0

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1800, BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10				.1		.1
0.15				.0		.0
0.20				.0		.0
0.25						
SUM				.2		.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 1800, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
0.05						
0.10				.1		.1
0.15				.0		.0
0.20				.0		.0
0.25						
SUM				.2		.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 2100, BY MISSION SEG. ASCENT

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15			.1			.1
0.20						
SUM			.1			.1

TABLE XLV - Concluded

MINUTES FOR CT/S VS MU BY RATE OF CLIMB 2100. BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
0.10						
0.15			.1			.1
0.20						
SUM			.1			.1

MINUTES FOR CT/S VS MU BY RATE OF CLIMB SUM, BY MISSION SEG. SUM

	LESS	0.02	0.04	0.06	0.08	SUM
LESS			67.9	25.5	.1	93.5
0.05			91.3	23.7	.2	115.2
0.10			121.8	76.9		198.7
0.15			718.0	498.9		1216.9
0.20			1095.9	737.0	31.[illegible]	1864.5
0.25			40.7	38.0	.3	79.0
0.30						
SUM			2135.6	1400.0	32.2	3567.7

TABLE XLVI. TIME FOR ENGINE TORQUE VERSUS AIRSPEED BY WEIGHT AND ALTITUDE

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE LESS

	LESS	10	20	30	40	50	60	70	SUM
LESS			1.1						1.1
40		.8							.8
60		.2	.2						.4
70		.3							.3
75									
80		.4							.4
85			.1						.1
90			.2						.2
95		.1							.1
100			.3	1.4					1.7
105				3.4					3.4
110				4.4					4.4
115									
SUM		1.8	1.8	9.3					12.9

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -6000

	LESS	10	20	30	40	50	60	70	SUM
LESS			.7	1.0	.1				1.9
40		.3	3.9	.2	.2				4.6
60		.8	1.6	.6	.2				3.2
70			.4	.2					.6
75		.3	.9	.4	.7				2.3
80		.4	3.9	2.1					6.3
85			1.5	2.6					4.0
90		.1		1.9					2.0
95			.7	.4					1.1
100		.1	1.2	5.2					6.4
105				4.2					4.2
110			.6	1.5					2.1
115			.6	.8					1.4
120			.1	.5					.6
125									
SUM		2.0	16.0	21.6	1.2				40.8

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -3000

	LESS	10	20	30	40	50	60	70	SUM
LESS	.5	1.2	10.2	9.4	.4				21.7
40	.4	3.9	2.7	.9	.3				8.3
60	.4	2.2	2.1	1.2					5.9
70	.2	1.6	2.2	1.2	.1				5.4
75	.1	4.1	6.4	4.1	.1				14.8
80		2.7	14.2	5.2	.2				22.3
85	.1	1.0	16.5	1.7	.1				19.5
90	.1	1.6	24.9	9.2	.1				35.8
95		.8	27.7	18.2	.1				46.8
100		.5	17.1	32.4	2.9				52.9
105		.3	4.6	12.7	8.2				25.8
110			.5	15.2	8.3				23.9
115				17.0	.4				17.4
120				6.2					6.2
125									
SUM	1.8	20.0	129.1	134.6	21.2				306.7

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 0

	LESS	10	20	30	40	50	60	70	SUM
LESS			.1	.3					.4
40		.4							.4
60		.3	.5						.7
70		.1	.2						.3
75	.4	.6	.7	.1					1.7
80	.1	1.0	1.2	.1					2.4
85	.1	1.5	2.4	.2					4.2
90		1.0	8.0	1.9					10.9
95		1.5	14.6	3.1					19.2
100			8.3	8.0					16.3
105			.9	4.3	.2				5.4
110				1.0					1.0
115				.7					.7
120				.1					.1
125				.0					.0
SUM	.6	6.4	36.8	19.8	.2				63.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 3000

	LESS	10	20	30	40	50	60	70	SUM
85									
90			.3						.3
95			.5						.5
100			.4						.4
105									
SUM			1.2						1.2

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.5	1.2	12.1	10.8	.5				25.0
40	.4	5.5	6.6	1.1	.5				14.1
60	.4	3.5	4.4	1.8	.2				10.3
70	.2	2.0	2.9	1.4	.1				6.6
75	.5	5.0	8.0	4.5	.9				18.8
80	.1	4.5	19.3	7.3	.2				31.4
85	.2	2.5	20.4	4.5	.1				27.7
90	.1	2.7	33.4	12.9	.1				49.1
95		2.4	43.5	21.8	.1				67.8
100		.6	27.3	47.0	2.9				77.8
105		.3	5.5	24.7	8.3				38.8
110			1.1	22.1	8.3				31.4
115			.6	18.5	.4				19.5
120			.1	6.8					6.9
125				.0					.0
SUM	2.4	30.1	185.0	185.3	22.5				425.3

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000, BY ALTITUDE LESS

	LESS	10	20	30	40	50	60	70	SUM
LESS		.5	7.8	5.8	1.0				15.0
40		1.1	3.6	1.7	.6				7.0
60		.5	1.1	.1	.4				2.2
70		.1	.5	2.2	.4				3.2
75		.0	1.4	4.3	.4				6.2
80		.1	.6	3.2	.8				4.6
85			.9	8.6	1.2				10.8
90			2.7	5.5	21.5				29.7
95			1.6	6.1	8.6				16.4
100			.3	11.7	1.8				13.8
105			.1	5.3	1.8				7.2
110			.2	.5	1.9				2.6
115				.1					.1
120									
SUM		2.3	20.8	55.2	40.3				118.6

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000, BY ALTITUDE -6000

	LESS	10	20	30	40	50	60	70	SUM
LESS		.3	10.6	17.9	2.7	.4			31.9
40		2.5	11.7	3.5	1.0	.2			18.8
60		.7	6.7	2.6	.5	.1			10.6
70		.5	1.5	1.2	.4	.1			3.6
75		.2	2.2	1.1	.3	.0			3.9
80		.2	3.6	2.9	.7	.0			7.4
85			2.0	6.8	1.8	.1			10.6
90			12.9	21.4	3.8	.1			38.1
95		.2	12.5	39.9	7.9	.3			60.8
100			7.8	30.0	2.9	2.4			43.1
105			4.4	41.5	8.2	.4			54.5
110			.8	22.8	8.0				31.6
115				16.6	8.8				25.4
120				.3	.9				1.3
125									
SUM		4.6	76.6	208.3	47.8	4.1			341.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000, BY ALTITUDE -3000

	LESS	10	20	30	40	50	60	70	SUM
LESS		3.2	38.0	25.9	2.4	.3			69.7
40	1.0	16.0	12.7	6.4	.7	.1			37.0
60	.6	13.1	10.7	8.5	.4	.1			33.4
70	.2	7.4	5.5	4.7	.4	.2			18.5
75	.3	6.3	15.0	9.1	.4				31.1
80	.4	5.3	42.4	12.0	3.1				63.4
85	.4	2.9	44.8	21.5	2.5				72.1
90	.4	1.8	71.4	34.8	5.1				113.5
95	.2	.6	118.1	79.0	10.0				208.0
100		.8	58.3	82.3	35.6	.7			177.7
105		.1	15.9	77.5	41.0	1.7			136.2
110			5.9	42.2	31.9	2.1			82.0
115			2.1	20.4	19.6	3.3			45.4
120				3.0	3.6	.3			7.0
125				.1	.0	.0			.2
SUM	3.5	57.5	440.7	427.6	156.9	8.9			1095.0

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 0

	LESS	10	20	30	40	50	60	70	SUM
LESS	.4	.2	9.9	14.1	1.0				25.6
40	.7	2.8	6.3	2.6	.1				12.5
60	.3	3.1	8.2	4.3	.3				16.2
70	.3	5.1	6.5	4.7	.9				17.5
75	.7	3.2	13.3	2.9	.2				20.3
80	.4	2.2	28.7	7.6	.0				39.0
85	.1	3.5	49.8	14.2	.1				67.8
90	.0	1.7	45.9	17.3	.5				65.5
95	.3	2.0	53.5	20.3	.9				76.9
100		1.8	20.2	26.5	.8				49.3
105		1.3	6.6	20.5	2.6				30.9
110		.4	2.0	13.4	5.0	3.9			24.6
115			1.1	18.2	.7				20.0
120			.2	1.7	.1				2.0
125			.1	.0					.1
SUM	3.2	27.3	252.2	168.2	13.4	3.9			468.2

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 3000

	LESS	10	20	30	40	50	60	70	SUM
LESS									
40			1.1	1.6					2.7
60			1.4	1.9					3.3
70			.6	.7					1.2
75			.8	.7					1.5
80		.2	1.1	1.2					2.5
85		.6	2.4	.3					3.3
90		.9	3.5	1.2					5.6
95		1.1	13.1	5.3					19.5
100		.4	10.5	13.8					24.7
105			3.8	8.5					12.3
110			.5	30.7					31.2
115			1.9	14.1					16.0
120									
SUM		3.3	40.6	80.0					123.9

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 6000

	LESS	10	20	30	40	50	60	70	SUM
LESS									
40				.1					.1
60			.1	.2					.3
70				.5					.5
75			.1	.3					.4
80			.1	.6					.7
85			.1	.4					.5
90			.8	.6					1.4
95			1.5						1.5
100				.3					.3
105			.6	2.7					3.3
110				2.0					2.0
115				.6					.6
120									
SUM			3.4	8.3					11.7

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.4	4.1	66.2	63.6	7.2	.7			142.2
40	1.7	22.4	35.4	16.0	2.4	.3			78.1
60	.9	17.4	28.2	17.6	1.7	.2			65.9
70	.5	13.2	14.5	13.9	2.1	.3			44.5
75	1.0	9.7	32.8	18.3	1.3	.0			63.2
80	.8	8.0	76.5	27.6	4.7	.0			117.6
85	.5	7.0	100.0	51.8	5.7	.1			165.0
90	.5	4.4	137.2	80.8	30.9	.1			253.9
95	.5	3.9	200.3	150.7	27.4	.3			383.1
100		3.1	97.1	164.5	41.1	3.1			308.8
105		1.4	31.4	156.0	53.5	2.1			244.4
110		.4	9.4	111.6	46.7	6.0			174.0
115			5.1	70.0	29.2	3.3			107.6
120			.2	5.1	4.6	.3			10.2
125			.1	.1	.0	.0			.3
SUM	6.7	95.0	834.3	947.6	258.4	16.9			2158.8

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE LESS

	LESS	10	20	30	40	50	60	70	SUM
LESS		.2	.9	13.4	2.9				17.4
40		1.2	2.5	4.0	1.2	.1			9.0
60		.3	1.1	2.6	.7				4.8
70		.3	.6	.7	.1				1.7
75		.1	.7	1.0	.9				2.6
80		.1	1.2	1.0	1.5				3.8
85			.7	3.3	2.0				6.0
90			.1	3.7	3.8				7.6
95			.3	4.1	11.1				15.5
100				2.2	1.3				3.4
105				1.2	.3				1.6
110				.3					.3
115									
SUM		2.1	8.2	37.5	25.7	.1			73.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -6000

	LESS	10	20	30	40	50	60	70	SUM
LESS		.1	5.4	15.4	8.9	.3	.1		30.1
40		3.2	3.2	3.9	4.0	.1	.1		14.5
60		1.6	2.7	6.3	1.3				11.8
70		.1	2.1	4.8	.6				7.7
75		.6	1.4	9.7	2.1				13.9
80		.5	2.8	20.3	2.9				26.4
85	.1	.3	4.9	38.4	5.9				49.6
90		.3	5.2	57.3	12.0				74.8
95		.2	5.2	69.5	22.5				97.4
100		.2	9.6	91.5	33.4				134.6
105			2.8	73.7	35.0				111.6
110			.3	48.4	17.6				66.3
115			.4	13.3	11.4				25.1
120			.3	1.3	3.4				5.0
125				.1					.1
SUM	.1	7.1	46.5	453.8	160.9	.3	.2		668.9

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -3000

	LESS	10	20	30	40	50	60	70	SUM
LESS		1.2	6.6	26.3	6.2				40.2
40	.1	3.6	1.6	5.9	3.0	.1			14.2
60		1.9	3.8	7.0	.9				13.6
70		1.1	4.6	7.7	1.2				14.6
75		.7	11.8	11.4	1.4				25.4
80		.1	21.8	13.9	3.7				39.5
85		.3	45.7	18.1	2.6				66.7
90	.6	.7	48.4	52.1	5.6				107.4
95		.1	15.2	123.8	21.0				160.2
100		.2	13.1	129.9	29.9				173.1
105		.3	2.8	46.3	30.8				80.2
110				13.9	17.4				31.3
115				1.1	21.5				22.6
120					.1				.1
125									
SUM	.7	10.1	175.5	457.3	145.2	.1			788.9

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 0

	LESS	10	20	30	40	50	60	70	SUM
LESS		.6	4.9	5.4	1.3	.3			12.5
40	.3	2.7	5.6	3.1	1.1				12.8
60	.1	2.1	9.1	3.4					14.7
70	.1	2.0	9.4	4.3	.5				16.4
75	.0	2.2	15.2	7.0	1.0				25.4
80		1.0	25.4	25.0	.0				51.4
85		.3	29.0	51.1	.6				81.1
90		.1	30.1	24.1	.1				54.4
95		.2	37.0	38.7	.7				76.5
100		.2	16.7	20.4	.3				37.6
105			2.4	7.1	.6	.1			10.2
110			.3	1.1	.7	.1			2.1
115				.1	.4				.5
120						.2			.2
125									
SUM	.5	11.5	185.1	190.7	7.4	.6			395.8

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 3000

	LESS	10	20	30	40	50	60	70	SUM
75									
80				.2					.2
85			.2	.6					.8
90			2.2	1.9					4.1
95			2.3	8.0					10.3
100				7.4					7.4
105				2.2					2.2
110									
SUM			4.7	20.3					25.0

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 6000

	LESS	10	20	30	40	50	60	70	SUM
85									
90				2.2					2.2
95				4.7					4.7
100				10.5					10.5
105				5.8					5.8
110				.9					.9
115									
SUM				24.1					24.1

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS		2.0	17.8	60.5	19.2	.5	.1		100.2
40	.4	10.7	12.9	16.9	9.3	.3	.1		50.6
60	.1	5.9	16.8	19.3	2.9				44.9
70	.1	3.5	16.8	17.6	2.5				40.4
75	.0	3.6	29.1	29.0	5.3				67.1
80		1.6	51.2	60.3	8.1				121.3
85	.1	1.0	80.5	111.5	11.0				204.1
90	.6	1.1	86.1	141.2	21.5				250.5
95		.6	60.0	248.8	55.3				364.6
100		.6	39.4	261.8	64.8				366.6
105		.3	8.1	136.3	66.8	.1			211.5
110			.6	64.6	35.6	.1			100.9
115			.4	14.5	33.3				48.2
120			.3	1.3	3.5	.2			5.3
125				.1					.1
SUM	1.3	30.9	420.0	1183.8	339.2	1.2	.2		1976.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE LESS

	LESS	10	20	30	40	50	60	70	SUM
LESS		.2	1.0	5.6	2.2	.3			9.2
40			1.5	1.2	.9				3.6
60			1.7	1.1	1.3				4.2
70			.1	.7	1.4				2.2
75			.6	1.6	.8				3.1
80			.5	5.9	3.0				9.4
85		.1	.0	6.5	1.3				8.0
90			.2	2.5	1.4				4.1
95				1.8	1.0				2.8
100				.7	2.1				2.8
105				.5	8.0				8.5
110				.3	22.9				23.2
115				.6	6.4				7.0
120				.3	.3				.6
125									
SUM		.3	5.8	29.3	53.1	.3			88.6

TABLE XLVI - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -6000

	LESS	10	20	30	40	50	60	70	SUM
LESS		.5	.4	4.1	2.6	.1			7.7
40		.3		1.6	1.0	.1			3.0
60		.1	.1	2.0	.5				2.8
70				1.6	1.0	.5			3.1
75		.3		5.0	1.9				7.3
80		.5	.1	10.6	3.4				14.7
85		.3	.7	17.2	3.4				21.6
90			2.2	22.9	3.5				28.5
95			.6	10.6	.8				12.1
100			.9	10.5	2.0				13.5
105			.1	3.6	12.3				15.9
110		.3	.3	2.1	[illegible]7.6				40.2
115			.2	2.1	[illegible].3				17.6
120				.3	.7				.9
125									
SUM		2.3	5.6	94.2	8[illegible]	.8			188.9

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -3000

	LESS	10	20	30	40	50	60	70	SUM
LESS		.3	2.1	7.3	.6	.2			10.4
40		1.8	4.8	3.6	.2				10.5
60		.3	5.0	2.9	.3				8.5
70		.1	6.3	3.7	.5				10.6
75		.1	8.0	3.9	.1				12.1
80			5.9	14.0	.2				20.1
85			6.2	29.4	1.3				37.0
90			10.7	23.5	5.9				40.0
95			9.8	23.1	3.4				36.3
100			12.7	48.3	8.3				69.3
105			3.6	8.2	3.8				15.6
110				1.8					1.8
115				.1					.1
120									
SUM		2.7	75.1	169.7	24.5	.2			272.2

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE 0

	LESS	10	20	30	40	50	60	70	SUM
LESS			.4	.2					.6
40		.3		.1					.4
60		.7		.1					.8
70		.3	.2						.4
75			2.0	3.4					5.5
80		.4	7.1	14.3					21.9
85			10.4	39.2					49.7
90			1.1	26.8					27.9
95			9.8	1.4					11.2
100			10.7						10.7
105			1.9						1.9
110									
SUM		1.6	43.7	85.7					131.1

TABLE XLVI - Concluded

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS		1.0	3.9	17.2	5.3	.6			27.9
40		2.3	6.3	6.6	2.1	.1			17.4
60		1.1	6.9	6.1	2.2				16.3
70		.4	6.6	5.9	3.0	.5			16.4
75		.5	10.7	14.0	2.8				28.0
80		.9	13.6	44.9	6.6				66.0
85		.4	17.4	92.4	6.1				116.3
90			14.2	75.7	10.7				100.6
95			20.2	37.0	5.2				62.4
100			24.4	59.5	12.4				96.3
105			5.5	12.2	24.1				41.8
110		.3	.3	4.2	60.4				65.2
115			.2	2.8	21.7				24.7
120				.6	.9				1.5
125									
SUM		6.9	130.2	378.9	163.6	1.2			680.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT SUM. BY ALTITUDE SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.9	8.3	100.1	152.0	32.2	1.8	.1		295.3
40	2.5	40.9	61.2	40.6	14.3	.8	.1		160.2
60	1.4	27.8	56.2	44.8	7.0	.2			137.4
70	.8	19.0	40.7	38.8	7.6	.8			107.8
75	1.5	18.8	80.5	65.8	10.4	.0			177.1
80	.9	15.0	160.6	140.1	19.6	.0			336.2
85	.8	11.0	218.3	260.1	22.9	.1			513.2
90	1.1	8.2	270.9	310.7	63.1	.1			654.2
95	.5	6.9	323.9	458.2	88.0	.3			877.8
100		4.3	188.2	532.8	121.1	3.1			849.5
105		1.9	50.5	329.2	152.8	2.2			536.6
110		.7	11.3	202.5	151.1	6.0			371.5
115			6.3	105.9	84.6	3.3			200.0
120			.6	13.8	9.1	.5			24.0
125			.1	.3	.0	.0			.4
SUM	10.4	162.8	1569.4	2695.5	783.7	19.3	.2		5241.3

TABLE XLVII. TIME FOR ENGINE TORQUE VERSUS ROTOR SPEED BY MISSION SEGMENT, RATE OF CLIMB, AND OUTSIDE AIR TEMPERATURE

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
314									
324					.1				.1
334									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324					.1				.1
334									
SUM			.1		.1				.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1	.4				.5
324				.3					.3
334									
SUM				.4	.4				.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.8	.1				.9
324				.5	.3				.8
334									
SUM				1.3	.4				1.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				1.2	.2				1.4
324				.5		.4			.9
334									
SUM				1.7	.2	.4			2.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.5	.7	.1	.1			1.4
324			.2	.4	.1				.6
334									
SUM			.7	1.1	.2	.1			2.1

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.2					.2
314			.4	.5	.1				1.0
324		.1	.3	.1					.5
334									
SUM		.1	.7	.8	.1				1.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324			.1	.2					.3
334									
SUM			.1	.2	.1				.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1						.1
334									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.2					.2
314			.9	3.3	1.0	.1			5.3
324		.1	.6	2.0	.4	.4			3.4
334									
SUM		.1	1.5	5.4	1.4	.5			8.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324				1.0					1.0
334									
SUM				1.0					1.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.3	.0				.3
314			.5	5.9	6.5				12.9
324			.6	5.0	8.0				13.6
334									
SUM			1.1	11.2	14.5				26.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			2.3	25.9	13.6				41.8
324		.2	.5	18.0	3.6	.1			22.4
334					.5				.5
SUM		.2	2.8	43.9	17.8	.1			64.7

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			2.3	41.5	35.1				78.9
324			3.0	6.8	6.0	4.9			20.7
334			.3	.4	.0				.8
SUM			5.7	48.7	41.1	4.9			100.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.1				.1
314			2.6	31.2	9.0	.1			42.8
324			14.4	17.2	1.3	.1			33.0
334			.2	1.1					1.3
SUM			17.1	49.5	10.4	.2			77.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
274									
284					.0				.0
294				.1	.0				.1
304				14.3					14.3
314		.2	12.0	14.4	.8				27.4
324		1.0	14.4	10.8	.2				26.5
334									
SUM		1.2	26.4	39.6	1.2				68.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			2.3	15.4	.1				17.8
314			6.1	1.3					7.4
324		.6	1.5	1.9	.2				4.1
334									
SUM		.6	9.9	18.5	.3				29.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1	.1					.3
334									
SUM			.1	.1					.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
274									
284					.0				.0
294				.1	.0				.1
304			2.3	30.0	.2				32.5
314		.2	25.7	120.1	65.0	.1			211.1
324		1.7	34.6	60.8	19.4	5.1			121.5
334			.5	1.5	.6				2.6
SUM		1.9	63.1	212.4	85.2	5.2			367.9

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324					.5				.5
334									
SUM					.5				.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.3	1.3	3.9				5.6
324			.1	4.6	7.5				12.2
334									
SUM			.4	5.9	11.4				17.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.2					.2
314				10.1	14.4				24.5
324			.3	5.8	9.5				15.6
334									
SUM			.3	16.1	23.9				40.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			2.1	21.7	9.2				33.0
324			.6	2.6	2.7	1.1			7.0
334				.6					.6
SUM			2.8	24.9	11.9	1.1			40.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.1	.2				.3
314			1.0	23.5	6.7	.2			31.4
324			4.3	7.1	1.6	.4	.1		13.5
334									
SUM			5.3	30.7	8.5	.6	.1		45.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304				3.3	.0				3.3
314			5.7	15.4	1.3	.2			22.6
324			3.1	8.4	.2				11.7
334									
SUM			8.8	27.1	1.5	.2			37.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.5	2.1	.1				2.6
314			2.9	1.1	.2				4.2
324			.5	.6					1.1
334									
SUM			3.9	3.9	.2				8.0

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.3	1.0					1.3
334									
SUM			.3	1.0					1.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.5	5.7	.3				6.4
314			12.0	73.2	35.8	.4			171.3
324			9.2	30.2	22.0	1.5	.1		63.0
334				.6					.6
SUM			21.7	109.6	58.1	1.9	.1		191.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.2					.2
334									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	1.6	2.3				4.0
324				3.0	5.7				8.7
334									
SUM			.1	4.6	8.0				12.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.3	3.9	8.2				12.5
324				1.4	6.3				7.7
334					.3				.3
SUM			.3	5.4	14.9				20.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	5.3	4.6	.8			10.8
324				.9	3.0	.7			4.6
334									
SUM			.1	6.1	7.6	1.5			15.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.4	5.9	2.8	.1			9.1
324			.3	1.8	1.0	.3			3.4
334				.1	.3				.4
SUM			.7	7.8	4.0	.4			12.9

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304				1.0					1.0
314			2.0	6.7	.2				8.8
324			1.0	2.5					3.5
334									
SUM			3.0	10.2	.2				13.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.3						.3
314			.2	.4	.2				.8
324		.1	.1	.2					.4
334									
SUM		.1	.6	.7	.2				1.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1						.1
334									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 600, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.3	1.0					1.3
314			3.0	23.8	18.4	.9			46.0
324		.1	1.7	10.0	15.9	1.0			28.6
334				.1	.6				.7
SUM		.1	4.9	34.9	34.8	1.9			76.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324					.1				.1
334									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.3	.8				1.1
324				.3	2.2				2.4
334									
SUM				.6	3.0				3.6

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.9	1.5	.1			2.5
324				.4	1.6				2.0
334									
SUM				1.2	3.1	.1			4.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				2.3	3.4	.3			6.0
324				.1	.3				.4
334				.1					.1
SUM				2.4	3.7	.3			6.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.0				.0
314			.2	2.1	.7				3.0
324				.8	.2				1.0
334									
SUM			.2	2.9	.9				4.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.0					.0
314			.3	1.5	.3				2.0
324			.3	1.0					1.3
334									
SUM			.6	2.5	.3				3.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.1	.1			.3
314				.2	.1				.2
324				.5	1.2				1.7
334									
SUM				.7	1.4	.1			2.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 900, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.0	.2	.1			.4
314			.5	7.2	6.7	.4			14.8
324			.3	3.0	5.5				8.8
334				.1					.1
SUM			.7	10.3	12.4	.6			24.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1	.1				.2
324					.6				.6
334									
SUM				.1	.7				.8

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.4	.4	.1			.9
324					.3				.3
334					.2				.2
SUM				.4	.8	.1			1.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.3	.2				.5
324				.0	.2				.2
334									
SUM				.4	.4				.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.7	.3				1.0
324				.2	.2				.4
334				.1					.1
SUM				1.0	.5				1.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2	.2					.4
324				.4					.4
334									
SUM			.2	.6					.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.1					.1
314									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.1					.1
314			.2	1.7	1.0	.1			3.0
324				.7	1.2				1.9
334				.1	.2				.3
SUM			.2	2.5	2.4	.1			5.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.2				.2
324				.1	.3				.4
334									
SUM				.1	.4				.5

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
314									
324					.2				.2
334									
SUM					.2				.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324					.1				.1
334									
SUM					.2				.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.4				.4
324				.1	.5				.6
334									
SUM				.1	.9				1.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324				.1					.1
334									
SUM				.2					.2

TABLE XLVII - Continued

MINUTES FOR TORQUF VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUF VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1								.1
324									
SUM	.1								.1

MINUTES FOR TORQUF VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324	.6								.6
334	.1								.1
SUM	.7		.1						.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1								.1
324									
SUM	.1								.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.2		.1						.2
324	.6								.6
334	.1								.1
SUM	.8		.1						.9

MINUTES FOR TORQUF VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1		.1						.2
324									
SUM	.1		.1						.2

TABLE XLVII - Continued

MINUTES FOR TORQUF VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
314									
324	.1								.1
334	.1								.1
SUM	.1								.1

MINUTES FOR TORQUF VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304	.2								.2
314									
SUM	.2								.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304	.2								.2
314	.1		.1						.2
324	.1								.1
334	.1								.1
SUM	.4		.1						.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, B OAT -40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1						.1
334									
SUM			.1						.1

MINUTES FOR TORQUF VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
314									
324		.1							.1
334									
SUM		.1							.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.2								.2
324									
SUM	.2								.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.2								.2
324		.1	.1						.2
334									
SUM	.2	.1	.1						.3

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	.2	.2				.5
324									
SUM			.1	.2	.2				.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1		.1		.1				.3
324									
SUM	.1		.1		.1				.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1								.1
324									
334	.1								.1
SUM	.1								.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304	.1								.1
314	.1								.1
324	.1								.1
334									
SUM	.2								.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304	.1								.1
314	.2		.2	.2	.3				.8
324	.1								.1
334	.1								.1
SUM	.4		.2	.2	.3				1.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1200. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1200. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.0	.4	.0				.5
324		.1	.1						.2
334									
SUM		.1	.1	.4	.0				.6

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1200. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	.4	.0				.5
324		.1	.1						.2
334									
SUM		.1	.2	.4	.0				.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1						.1
334									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2						.2
324			.0						.0
334									
SUM			.3						.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				1.5					1.5
324			.2						.2
334									
SUM			.2	1.5					1.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324			.3						.3
334									
SUM			.4						.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1								.1
324									
334	.1								.1
SUM	.1								.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -900. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314	.1		.3	1.5					1.9
324			.6						.6
334	.1								.1
SUM	.1		.9	1.5					2.5

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324				.1					.1
334									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.2					.2
324									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.8	2.8					3.5
324		.2	.2						.4
334									
SUM		.2	1.0	2.8					4.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.5	.1			.6
324									
SUM					.5	.1			.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2						.2
324			.2						.2
334									
SUM			.4						.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -600. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.9	3.1	.5	.1			4.7
324		.2	.4	.1					.7
334									
SUM		.2	1.4	3.2	.5	.1			5.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -300. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324			.4	.4					.9
334									
SUM			.5	.4					1.0

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.3	.3					.5
324				.2					.2
334									
SUM			.3	.5					.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			1.9	10.7	2.2	.3			14.9
324		.3	.2						.5
334									
SUM		.3	2.0	10.7	2.2	.3			15.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.4	.4	.5	.9		.1		2.3
324			.4						.4
334									
SUM		.4	.8	.5	.9		.1		2.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
LESS	.1								.1
274									
284									
294									
304									
314			.1	.2					.3
324		.3	.3						.6
334									
SUM	.1	.3	.4	.2					1.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.0					.0
314			.2	.1					.3
324		.2	.1						.3
334									
SUM		.2	.2	.2					.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.1								.1
274									
284									
294									
304				.0					.0
314		.4	2.8	11.8	3.1	.3	.1		18.4
324		.8	1.4	.6					2.8
334									
SUM	.1	1.2	4.2	12.4	3.1	.3	.1		21.4

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.2					.2
334									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.6	.2					.8
324									
SUM			.6	.2					.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				2.9					2.9
324			.1	.1					.2
334									
SUM			.1	3.0					3.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.4	.3	.3				.9
324									
SUM			.4	.3	.3				.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
LESS	.1								.1
274									
284	.1								.1
294	.1								.1
304									
314				.2					.2
324									
SUM	.2			.2					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.4					.4
334									
SUM				.4					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 300. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.1								.1
274									
284	.1								.1
294	.1								.1
304									
314			1.0	3.6	.3				4.8
324			.1	.7					.7
334									
SUM	.2		1.1	4.3	.3				5.8

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324					.3				.3
334									
SUM			.1		.3				.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	.3	.0				.4
324									
SUM			.1	.3	.0				.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				1.6	.2				1.8
324									
SUM				1.6	.2				1.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.3				.3
324									
SUM					.3				.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 600. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2	1.9	.5				2.5
324				.1	.3				.3
334									
SUM			.2	1.9	.8				2.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 900. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.6	.1				.6
324									
SUM				.6	.1				.6

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 900. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.6	.1				.6
324									
SUM				.6	.1				.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 1200. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 1200. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 1200. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB 1200. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1	.2				.3
324									
SUM				.1	.2				.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB LESS. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.3	.0						.3
324		.1							.1
334									
SUM		.4	.0						.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB LESS. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
314									
324		.1							.1
334									
SUM		.1							.1

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB LESS. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.3	.0						.3
324		.2							.2
334									
SUM		.5	.0						.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -2100. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.3						.3
324									
SUM			.3						.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -2100. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.3	.1	.1					.4
324									
SUM		.3	.1	.1					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -2100. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.2							.2
324									
SUM		.2							.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -2100. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.4	.3	.1					.9
324									
SUM		.4	.3	.1					.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.3						.3
334									
SUM			.3						.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2	.1					.3
324		.3							.3
334									
SUM		.3	.2	.1					.5

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.5	.2					.7
324			.1						.1
334									
SUM			.6	.2					.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1	.1	.1					.4
324		.6	.0						.6
334									
SUM		.7	.2	.1					1.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1							.1
324		.5							.5
334									
SUM		.6							.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324	.1								.1
334									
SUM	.1								.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1800. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.3	.8	.4					1.5
324	.1	1.3	.4						1.8
334									
SUM	.1	1.6	1.2	.4					3.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1	.2	.2					.4
324		.2	.6						.8
334									
SUM		.3	.8	.2					1.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.4	.6					1.0
324		.7	.1						.8
334									
SUM		.7	.5	.6					1.9

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.2	1.6	.6	.1				2.5
324				.1					.1
334									
SUM		.2	1.6	.7	.1				2.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.3	.4						.6
324		.2	.3						.5
334									
SUM		.5	.7						1.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.2	.6						.8
324	.1	1.0	.2						1.3
334									
SUM	.1	1.2	.8						2.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324	.1								.1
334									
SUM	.1								.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1500. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.7	3.2	1.4	.1				5.4
324	.2	2.2	1.2	.1					3.6
334									
SUM	.2	2.9	4.4	1.5	.1				9.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1200. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1	.5	.4					1.0
324			2.0	.9					2.9
334									
SUM		.1	2.4	1.3					3.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -1200. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.5	.8	1.2	.1				2.6
324		1.0	.8						1.9
334									
SUM		1.6	1.6	1.2	.1				4.5

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.5	1.7	2.4	.0				4.5
324		.6	.8	.1					1.6
334									
SUM		1.1	2.5	2.5	.0				6.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.9	1.6	.4					2.9
324		1.0	1.0	.1					2.1
334									
SUM		1.8	2.6	.5					5.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.5						.5
314		1.1	.1						1.2
324		2.5	.4						2.8
334									
SUM		3.5	1.0						4.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1							.1
324	.3	.1	.2						.6
334									
SUM	.3	.2	.2						.7

MINUTES FOR TORQUF VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324		.2							.2
334									
SUM		.2							.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.5						.5
314		3.1	4.7	4.3	.1				12.3
324	.3	5.5	5.2	1.1					12.0
334									
SUM	.3	8.6	10.3	5.4	.1				24.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.4	.7	3.1					4.2
324		.1	3.2	3.3					6.5
334									
SUM		.5	3.9	6.4					10.8

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.9	2.3	7.1	.9				11.1
324		1.3	3.6	.3					5.2
334									
SUM		2.2	5.9	7.3	.9				16.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			6.4	6.8	.5				13.6
324		.2	1.1	.4	.1				1.8
334									
SUM		.2	7.4	7.2	.6				15.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.4	3.4	1.9	.4				6.0
324		1.7	2.3	.1		.1			4.2
334									
SUM		2.1	5.7	2.0	.4	.1			10.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.4						.4
314		2.1	3.3	.9					6.3
324	.3	3.7	1.2	.0					5.3
334									
SUM	.3	5.8	4.9	1.0					12.0

MINUTES FOR TORQUF VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	.1					.2
324	.4	.8	.3						1.5
334									
SUM	.4	.8	.4	.1					1.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324		.2							.2
334									
SUM		.2							.2

MINUTES FOR TORQUF VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -900. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.4						.4
314		3.7	16.2	19.9	1.7				41.5
324	.7	8.1	11.7	4.1	.1	.1			24.8
334									
SUM	.7	11.8	28.2	24.1	1.8	.1			66.7

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1	.7	1.1				1.9
334									
SUM			.1	.7	1.1				1.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT -80

	LESS	10	20	[illegible]	40	50	60	70	SUM
304									
314		1.7	2.2	7.[illegible]	.8				12.4
324		.3	2.9	12.6	.7				16.5
334									
SUM		1.9	5.1	20.4	1.4				28.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.4	6.7	12.2	1.9				21.2
324		.4	4.2	.9	.2				5.7
334									
SUM		.9	10.9	13.1	2.0				27.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314		1.2	7.1	16.8	.9	.1			26.0
324		1.1	1.7	1.2	.3				4.3
334									
SUM		2.3	8.8	18.0	1.2	.1			30.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				1.6					1.6
314		1.9	6.2	11.5	.5				20.1
324		4.0	10.2	1.1	1.0				16.2
334									
SUM		5.9	16.3	14.1	1.5				37.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.9	4.1					5.1
314		6.8	10.1	1.7					18.6
324	.2	5.5	4.1	.2					10.0
334									
SUM	.2	12.4	15.1	6.0					33.7

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			2.0	1.3					3.3
314		.7	.4						1.1
324	.2	2.0	.9	.2					3.3
334									
SUM	.2	2.6	3.3	1.5					7.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.2	.6					.8
334									
SUM			.2	.6					.8

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -600. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			2.9	7.0					9.9
314		12.7	32.7	49.9	4.0	.1			99.5
324	.4	13.3	24.3	17.6	3.2				58.8
334									
SUM	.4	26.0	59.9	74.5	7.2	.1			168.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.1	.2	.9				1.2
334									
SUM			.1	.2	.9				1.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.1				.1
314		.5	4.8	12.4	2.9				20.7
324		.1	2.0	18.9	4.3				25.3
334									
SUM		.6	6.8	31.3	7.3				46.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			10.6	33.9	6.4				50.9
324		1.0	3.8	2.5					7.3
334									
SUM		1.0	14.4	36.4	6.4				58.2

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1	3.0	34.7	11.7				49.4
324		1.9	1.9	1.9	14.9	.4			21.0
334									
SUM		2.0	4.9	36.6	26.6	.4			70.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				2.5	.1				2.6
314		2.7	12.8	13.5	7.0				35.9
324		5.6	21.7	2.5	.2				29.9
334			.5	.3					.9
SUM		8.2	35.0	18.8	7.3				69.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			1.9	22.3					24.2
314		2.5	12.6	11.3	.2				26.5
324	.3	5.4	24.7	6.0					36.4
334									
SUM	.3	7.9	39.2	39.6	.2				87.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.3	9.7					10.0
314		.4	2.2						2.7
324		1.7	5.0	1.4					8.1
334		.4							.4
SUM		2.6	7.5	11.1					21.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.7	1.4					2.1
334									
SUM			.7	1.4					2.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB -300. BY OAT SUM

	LESS	10	20	30		50	60	70	SUM
294									
304			2.2	34.5	.2				36.9
314		6.2	46.0	105.8	28.1				186.1
324	.3	15.6	59.8	34.8	20.3	.4			131.2
334		.4	.5	.3					1.3
SUM	.3	22.3	108.5	175.5	48.6	.4			355.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.3	.1				.3
324				.9	.3				1.2
334									
SUM				1.2	.4				1.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314		.1	.1	1.1					1.3
324									
SUM		.1	.1	1.1					1.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.3				.3
314			.1	1.5	.4				2.0
324			.5	.0	.2	.1			.8
334									
SUM			.6	1.5	.9	.1			3.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.2					.2
314			.6	1.2	.1	.1			2.0
324		.1	.5	.3	.1				1.0
334									
SUM		.1	1.1	1.7	.2	.1			3.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.2	.6					.8
314			.9	.3					1.2
324		.1	.2		.1				.3
334									
SUM		.1	1.2	.9	.1				2.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.1					.1
314				.1					.1
324			.2						.2
334									
SUM			.2	.2					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT. BY RATE OF CLIMB 300. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.2	1.0	.3				1.4
314		.1	1.7	4.4	.6	.1			6.9
324		.2	1.3	1.3	.6	.1			3.5
334									
SUM		.3	3.2	6.7	1.5	.2			11.8

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 600. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 600. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.2					.2
324									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 600. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.2					.2
324									
SUM				.2					.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 600. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.4					.4
324				.1					.1
334									
SUM				.4					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 900. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 900. BY OAT -20

	LESS	0	20	30	40	50	60	70	SUM
304									
314					.1				.1
324									
SUM					.1				.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 900. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1	.1				.2
324									
SUM				.1	.1				.2

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.4					.4
324									
SUM				.4					.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.2						.2
334									
SUM			.2						.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.5					.5
324									
SUM				.5					.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2						.2
324									
SUM			.2						.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2	1.0					1.1
324			.2	.2					.4
334									
SUM			.4	1.2					1.6

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.6	1.9	2.2				4.6
324				.4	.3				.7
334									
SUM			.6	2.3	2.4				5.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.3	1.9	1.2				3.4
324			.6	1.8	.3				2.7
334				.2					.2
SUM			.9	3.9	1.6				6.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				10.6	2.6				13.2
324			.1	.7	.1				.9
334									
SUM			.1	11.3	2.7				14.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			1.4	5.5	.2				7.1
324		.1	2.4	1.9	.3				4.6
334				.3					.3
SUM		.1	3.8	7.7	.5				12.0

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.9					.9
314		.3	3.5	.5	.4				4.7
324			1.0						1.0
334									
SUM		.3	4.5	1.5	.4				6.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
LESS									
274			.1						.1
284									
294									
304			.8	1.6					2.4
314									
324			.4	.2					.6
334									
SUM			1.3	1.8					3.1

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS									
274			.1						.1
284									
294									
304			.8	2.5					3.3
314		.3	5.8	20.5	6.5				33.0
324		.1	4.4	5.0	1.0				10.4
334				.5					.5
SUM		.4	11.1	28.4	7.5				47.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT -100

	LESS	10	20	30	40	50	60	70	SUM
294									
304					.9				.9
314					1.3				1.3
324				4.0	14.0				18.0
334									
SUM				4.0	16.2				20.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
294									
304				1.1					1.1
314			3.9	55.3	40.5				99.8
324			3.2	29.1	27.4				59.7
334									
SUM			7.1	85.5	68.0				160.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.3					.3
314			11.9	172.8	146.3				331.0
324			3.8	21.1	8.1	.2			33.2
334				.2	.3				.4
SUM			15.7	194.3	154.7	.2			364.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			2.8	259.4	183.2	.1			445.5
324			.8	15.8	21.0				37.6
334									
SUM			3.6	275.2	204.2	.1			483.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314			123.7	169.3	28.[illegible]	7.2			328.7
324		.5	96.7	72.7	5.8				175.7
334				2.7					2.7
SUM		.5	220.4	244.7	34.4	7.2			507.1

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			3.4	35.8					39.2
314		1.3	153.7	117.4	12.8				285.2
324			59.3	35.2					94.5
334									
SUM		1.3	216.4	188.4	12.8				418.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
274									
284				.9					.9
294									
304			39.2	28.1					67.3
314			11.9	2.5					14.4
324			37.6	13.8					51.3
334									
SUM			88.6	45.3					133.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.2						.2
324			6.8	11.6					18.5
334									
SUM			7.1	11.6					18.7

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
274									
284				.9					.9
294									
304			42.6	65.3	.9				108.7
314		1.3	308.2	776.7	412.8	7.3			1506.1
324		.5	208.2	203.3	76.4	.2			488.5
334				2.8	.3				3.1
SUM		1.7	559.0	1049.0	490.3	7.4			2107.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				1.1	1.2				2.3
324			.1	.4					.5
334									
SUM			.1	1.6	1.2				2.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	3.9	1.8				5.8
324			.4	.8	.4				1.5
334									
SUM			.5	4.6	2.2				7.3

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				8.7	4.0				12.6
324				.6	.1				.7
334									
SUM				9.3	4.1				13.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
294									
304				.1					.1
314			2.4	4.2	1.0				7.6
324			2.1	1.5	.1				3.7
334				.1					.1
SUM			4.5	5.9	1.0				11.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.6	.7					1.3
314			4.2	3.0	.1				7.3
324			1.1	.6					1.8
334									
SUM			5.9	4.4	.1				10.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
294									
304			.8	2.0					2.8
314				.2					.2
324			1.2	.9					2.2
334									
SUM			2.1	3.1					5.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT 40

	LESS	10	20	30	40	50	60	70	SUM
314									
324				.1					.1
334									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
294									
304			1.4	2.8					4.2
314			6.7	21.1	8.0				35.8
324			4.9	5.0	.6				10.4
334				.1					.1
SUM			13.0	28.9	8.6				50.5

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600, BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.2	.2				.3
324									
SUM				.2	.2				.3

TABLE XLVII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600. BY OAT -60

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.3	.2				.4
324									
SUM				.3	.2				.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.2	.1				.3
324									
SUM				.2	.1				.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600. BY OAT -20

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600. BY OAT 20

	LESS	10	20	30	40	50	60	70	SUM
314									
324			.3						.3
334									
SUM			.3						.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 600. BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.7	.4				1.1
324			.3						.3
334									
SUM			.3	.7	.4				1.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 900. BY OAT -80

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 900. BY OAT -40

	LESS	10	20	30	40	50	60	70	SUM
304									
314				.1					.1
324									
SUM				.1					.1

TABLE XLVII - Concluded

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 900, BY OAT 0

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1						.1
324									
SUM			.1						.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 900, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
304									
314			.1	.2					.3
324									
SUM			.1	.2					.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG. SUM, BY RATE OF CLIMB SUM, BY OAT SUM

	LESS	10	20	30	40	50	60	70	SUM
LESS	.2								.2
274			.1						.1
284	.1			.9	.0				1.0
294	.1			.1	.0				.2
304	.3		53.9	150.1	2.0	.1			206.5
314	.7	29.7	474.7	1259.1	595.8	9.8	.1		2369.7
324	2.7	50.0	370.9	380.8	167.4	8.8	.1		980.6
334	.2	.4	1.0	6.2	1.6				9.5
SUM	4.2	80.1	900.6	1797.2	766.9	18.7	.2		3567.7

TABLE XLVIII. TIME FOR LONGITUDINAL CYCLIC BOOST TUBE STEADY LOAD VERSUS AIRSPEED BY WEIGHT AND ALTITUDE

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT [illegible] BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	.7									1.1
60									.8									.8
65									.4									.4
70									.3									.3
75																		
80										.4								.4
85										.1								.1
90									.2									.2
95									.1									.1
100									1.7									1.7
105									3.4									3.4
110									4.4									4.4
115																		
SUM								.4	12.0	.5								12.9

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT [illegible] BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									1.6									1.6
60									4.3	.2								4.5
65									2.2		1.0							3.2
70									.6									.6
75									1.4		.8							2.2
80									.9		4.7	.7						6.3
85											2.7	1.3						4.0
90											1.8	.1						1.9
95									.7	.1	.3							1.1
100									1.8	4.3								6.2
105									2.0	1.9	.3							4.2
110									.8									.8
115																		
SUM									16.3	6.6	11.5	2.2						36.5

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT [illegible] BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									20.7	1.0								21.7
60									5.7	2.6								8.3
65									3.2	2.5	.2							5.9
70									2.4	1.9	1.1							5.4
75									3.1	3.8	7.7	.2						14.8
80									2.7	3.2	16.1	.3						22.3
85									2.8	3.0	12.9	.8						19.5
90									4.7	11.1	19.3	.6						35.7
95									3.6	34.9	7.0	.1						45.6
100									9.9	34.5	5.4	1.3						51.1
105									4.0	7.0	7.2	.5						18.7
110									7.8	2.8	6.8	1.3						18.7
115									15.0	.3	.4							15.7
120									5.2	.9								6.1
125																		
SUM									90.8	109.6	83.9	5.1						289.4

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT [illegible] BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									.4									.4
60									.4									.4
65										.7								.7
70									.1	.2								.3
75									.2	1.5								1.7
80									1.0	1.3	.1							2.4
85									.6	3.5	.1							4.2
90									2.8	6.9		1.2						10.9
95									2.7	13.8	.9	1.9						19.2
100									2.5	6.1		7.8						16.3
105									2.1			3.4						5.4
110									1.0									1.0
115									.7									.7
120									.1									.1
125									.0									.0
SUM									14.5	34.1	1.0	14.0						63.7

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT [illegible] BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
85																		
90									.3									.3
95									.5									.5
100									.4									.4
105																		
SUM									1.2									1.2

TABLE XLVIII - Continued

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	23.3	1.0								24.8
40									11.1	2.9								14.0
60									5.9	3.2	1.2							10.2
70									3.3	2.2	1.1							6.6
75									4.6	5.3	8.5	.2						18.7
80									4.6	4.9	20.8	1.1						31.4
85									3.4	6.5	15.6	2.2						27.7
90									8.0	18.0	21.1	1.9						49.0
95									7.6	48.8	8.2	2.0						66.6
100									16.4	45.0	5.4	8.9						75.6
105									11.5	8.9	7.6	3.9						31.8
110									14.0	2.8	6.8	1.3						24.9
115									15.7	.3	.4							16.4
120									5.3	.9								6.2
125									.0									.0
SUM								.4	134.8	150.7	96.5	21.4						403.8

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									2.2	.8								3.0
40									1.4	.1								1.5
60									.7		.1							.7
70									.8		.1							.9
75									1.2		.1							1.3
80									2.2	.6								2.7
85									4.6	3.6								9.1
90									2.1	19.7	.2							22.0
95									1.0	4.4	2.4							7.9
100									9.4	1.7	.5							11.6
105									4.6	.2	1.8							6.6
110									.5		.6	1.3						2.4
115																		
SUM									30.8	31.1	5.7	1.3						68.9

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									24.2	4.1	.2							28.5
40									15.7	1.8	.0	.4						18.0
60									9.1	.8	.0							10.0
70									2.5	.6		.1						3.1
75									2.3	1.1		.0						3.4
80									3.9	2.9	.0							6.9
85									4.8	1.9	.2							6.9
90									14.5	7.5	.1							22.0
95									26.2	11.7		.1						38.0
100									17.9	13.7		2.2						33.8
105									23.2	15.6		.4						39.2
110									8.8	6.8	.1	.4						16.1
115									.1	.9								1.0
120																		
SUM									153.2	69.4	.7	3.6						227.0

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.1	56.8	8.8	2.3							68.9
40									18.5	12.0	5.1	.3						35.9
60									14.0	10.4	6.4	.5						31.3
70									8.4	5.4	2.7	.3						16.8
75									15.4	8.1	4.5	.3						28.4
80									26.8	9.9	19.4	4.1						60.2
85									37.0	17.0	8.2	3.3						65.4
90									71.3	25.8	5.0	.7						102.8
95									156.7	36.4	11.3	2.8						207.2
100									84.4	29.8	31.4	5.0						150.6
105									20.1	36.1	23.9	18.9						99.0
110									7.2	10.2	8.4	28.1						53.8
115									2.0	4.5	5.3	15.4	.1					27.3
120									.9	.1		2.8	.2					4.0
125													.0					.0
SUM								1.1	519.5	214.4	133.9	82.4	.4					951.7

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	2.2	10.4	8.2	4.2	.4						25.6
40									6.5	1.3	4.1	.6						12.5
60									10.4	2.9	1.7	.3	.2					15.4
70									8.7	5.7	1.4	.5	.0					16.3
75									11.3	6.1	1.2	1.3						19.9
80									11.6	11.9	9.6	4.6	.9					38.7
85									32.6	23.0	9.4	2.1	.4					67.6
90									38.9	18.3	5.9	1.5	.1					64.7
95									40.4	21.6	10.2	2.9						75.1
100									21.4	14.7	10.1	2.0	.1					48.2
105									9.9	7.0	7.6	3.7						28.2
110									5.0	1.5	1.6	9.0						17.1
115									.7	.6	2.3	1.3						4.8
120									.6			.1						.7
125									.1									.1
SUM							.1	2.2	208.5	122.7	69.4	30.2	1.8					434.9

TABLE XLVIII - Continued

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS																		
40									2.6	.1								2.7
60									3.2	.1								3.3
70									1.1	.1								1.2
75									1.4	.1								1.5
80									2.4	.1								2.5
85									2.0	.0	1.0	.2						3.3
90									3.9	.0	.6	1.0						5.6
95									5.4		5.3	7.7						18.4
100									2.1	.4	14.8	3.1						20.4
105										.2	3.2	.9						4.3
110											.6							.6
115																		
SUM									24.2	1.1	25.5	12.9						63.8

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS																		
40									.1									.1
60									.3									.3
70									.5									.5
75									.4									.4
80									.7									.7
85									.5									.5
90									1.4									1.4
95									1.5									1.5
100																		
SUM									5.4									5.4

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	3.3	93.6	21.9	6.7	.4						126.0
40									44.9	15.3	9.3	1.3						70.8
60									37.6	14.1	8.2	.8	.2					60.9
70									22.0	11.8	4.2	.9	.0					38.9
75									31.9	15.4	5.8	1.7						54.8
80									47.7	25.3	29.1	8.7	.9					111.7
85									81.6	45.4	18.8	5.5	.4					151.8
90									132.2	71.3	11.8	3.2	.1					218.6
95									231.2	74.1	29.3	13.5						348.1
100									135.2	60.3	56.7	12.3	.1					264.7
105									57.7	59.1	36.6	23.8						177.3
110									21.5	18.5	11.2	38.8						90.1
115									2.8	6.0	7.5	16.7	.1					33.2
120									1.5	.1		2.9	.2					4.7
125									.1				.0					.1
SUM							.1	3.3	941.7	438.8	235.3	130.4	2.2					1751.7

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.1									3.1
40								.4	3.2	1.9	.1							5.6
60									2.0	1.2	.1							3.3
70									1.0	.2								1.2
75									.8	1.1								1.9
80									1.3	1.1								2.4
85									2.6	2.6								5.1
90									1.0	5.6								6.6
95									.2	11.3	2.4							13.9
100										1.1	.2							1.3
105											.3							.3
110																		
SUM								.4	15.2	26.1	3.0							44.7

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									11.7	1.6	.6	.3						14.2
40									7.7	2.9	1.0	.2						11.8
60									4.9	1.9	1.4							8.2
70									2.6	1.9	1.3							5.8
75									4.6	2.1	1.7							8.3
80									7.0	2.5	1.1							10.6
85									14.9	4.8	.8							20.5
90									19.4	7.9								27.3
95									31.7	14.2	.3							46.1
100									43.2	41.6	1.6							86.4
105									27.1	38.4	2.1							67.6
110									4.1	15.1	.9							20.1
115									.3	.7	.6							1.7
120																		
SUM									179.2	135.6	13.4							328.6

TABLE XLVIII - Continued

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.4	36.5	4.6	1.4							44.0
40									5.0	3.5	1.3							9.8
60									3.8	3.0	.8							7.6
70									4.5	3.0	1.4							9.0
75									4.8	9.6	4.3							18.7
80									6.9	16.3	4.1							27.3
85									6.3	40.7	5.5							52.4
90									39.9	37.3	4.6							81.7
95									98.9	14.6	.4							113.9
100									93.7	31.8	.1	.2						125.8
105									15.8	18.3	.1	.1						34.3
110									2.3	1.5		.1						3.9
115												.1						.1
120																		
SUM								1.4	318.5	184.2	24.1	.5						528.6

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.1	6.0	4.6	1.8							12.5
40									4.8	4.1	3.5							12.4
60									4.2	7.7	1.8	.6						14.3
70									3.4	10.4	1.1	.3						15.1
75									8.4	10.8	4.5	1.3						25.0
80									13.4	14.9	19.8	1.6						49.8
85									15.8	32.7	28.2	1.5	.1	.1				78.4
90									14.3	22.0	8.4	1.5	.0					46.3
95									4.6	29.8	6.6	1.4						42.5
100									.2	16.9	2.6	1.1						20.8
105									.1	5.3	1.0	.4	.1					6.9
110										.7	.5	.5	.1	.2				2.0
115												.3	.2					.4
120													.2					.2
125																		
SUM								.1	75.3	159.9	79.8	10.5	.7	.3				326.5

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.5	57.3	10.9	3.9	.3						73.8
40								.4	20.7	12.4	6.0	.2						39.7
60									15.0	13.7	4.1	.6						33.4
70									11.5	15.5	3.8	.3						[illegible]
75									18.6	23.6	10.4	1.3						53.[illegible]
80									28.6	34.8	25.1	1.6						90.
85									39.6	80.8	34.4	1.5	.1	.1				156.5
90									74.6	72.8	12.9	1.5	.0					161.9
95									135.4	69.9	9.6	1.4						216.3
100									137.1	91.4	4.5	1.2						234.2
105									43.0	61.9	3.5	.5	.1					109.1
110									6.4	17.4	1.3	.7	.1	.2				25.9
115									.3	.7	.6	.4	.2					2.2
120													.2					.2
125																		
SUM								1.9	588.2	505.7	120.2	11.4	.7	.3				1228.4

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.5	.2	.2							3.9
40									1.6	.2	.2							2.1
60									1.4	.8	.2							2.4
70									.8	.5	.5							1.7
75									.8	.5	.4							1.7
80									.7	4.1	2.4							7.3
85										2.6	1.5							4.1
90											1.5	.1						1.6
95									.4		1.1							1.6
100									1.0		.9	.1						2.1
105									3.6		4.2	.7						8.5
110									9.2	2.7	5.3	[illegible]						23.2
115									1.7		[illegible]	2						7.0
120									.4									.6
125																		
SUM									25.1	11.9	21.5	.1						67.7

TABLE XLVIII - Concluded

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									5.4	.5	.1							6.0
40									.9	.5	.2							1.6
60									1.3	.5	.2							1.9
70									1.0	.5	.6							2.1
75									.8	.7	3.9							5.4
80									3.5	4.9	1.6							10.0
85									9.9	2.7	3.4							16.0
90									1.4	2.0	3.7							7.1
95										5.1	1.7							6.8
100									.6	4.5	4.7							9.7
105									7.5	2.2	5.9							15.6
110									27.3	.4	11.9							39.7
115									11.8	1.0	3.2	1.5						17.6
120									.2	.3		.5						.9
125																		
SUM									71.7	25.8	41.0	2.0						140.4

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									6.3	1.8	1.1	.1						9.4
40									4.0	3.4	2.6	.3						10.3
60									2.6	2.3	3.3	.2						8.3
70									.6	5.9	4.0	.2						10.6
75									2.2	3.7	5.9							11.8
80									1.1	12.6	6.3							20.1
85									.8	15.0	17.8							33.6
90									3.8	24.3	6.2							34.4
95									2.8	17.1	.2							20.1
100									41.4	19.4								60.8
105									4.7	5.2								9.8
110										.8								.8
115										.1								.1
120																		
SUM									70.3	111.8	47.4	.7						230.1

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									.3		.3							.6
40											.4							.4
60											.8							.8
70										.2	.3							.4
75										5.0	.5							5.5
80										5.8	16.1							21.9
85										16.4	33.3							49.7
90										3.3	24.7							27.9
95										6.8	4.4							11.2
100										7.8	3.0							10.7
105										1.9								1.9
110																		
SUM									.3	47.0	83.8							131.1

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									15.4	2.6	1.7	.1						19.8
40									6.5	4.2	3.4	.3						14.3
60									5.2	3.6	4.5	.2						13.5
70									2.3	7.1	5.3	.2						15.0
75									3.8	9.9	10.8							24.4
80									5.4	27.5	26.4							59.2
85									10.8	36.7	55.9							103.4
90									5.2	29.7	36.0	.1						71.0
95									3.2	29.0	7.4							39.7
100									43.0	31.6	8.6	.1						83.3
105									15.8	9.2	10.1	.7						35.8
110									36.5	4.1	17.2	5.9						63.7
115									13.5	1.2	6.3	3.7						24.7
120									.6	.3		.6						1.5
125																		
SUM									167.4	196.5	193.6	11.8						569.3

MINUTES FOR CYCLIC LONG VS AIRSPEED BY WEIGHT SUM. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	5.2	189.7	36.4	12.3	.8						244.4
40								.4	83.3	34.8	18.7	1.7						138.8
60									63.8	34.6	18.0	1.5	.2					118.1
70									39.2	36.5	14.4	1.3	.0					91.6
75									59.0	54.3	35.5	3.2						151.9
80									86.3	92.5	101.4	11.4	.9					292.4
85									135.4	169.4	124.7	9.2	.5	.1				439.4
90									220.0	191.7	81.9	6.7	.2					500.4
95									377.5	221.8	54.4	16.9						670.7
100									331.8	228.3	75.2	22.5	.1					657.9
105									128.0	139.1	57.8	28.9	.1					353.9
110									78.4	42.9	36.5	46.6	.1	.2				204.6
115									32.4	8.2	14.9	20.7	.3					76.4
120									7.4	1.3		3.5	.4					12.6
125									.1				.0					.2
SUM							.1	5.6	1832.1	1291.7	645.6	175.0	2.9	.3				3953.2

TABLE XLIX. TIME FOR LATERAL CYCLIC BOOST TUBE STEADY LOAD VERSUS AIRSPEED BY WEIGHT AND ALTITUDE

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									1.1									1.1
40									.8									.8
60									.2	.2								.4
70									.3									.3
75																		
80									.4									.4
85									.1									.1
90									.2									.2
95									.1									.1
100									1.7									1.7
105									3.4									3.4
110									4.4									4.4
115																		
SUM									12.7	.2								12.9

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									1.6									1.6
40									4.5									4.5
60									1.7	1.5								3.2
70									.2	.4								.6
75									1.2	1.0								2.2
80									6.0	.3								6.3
85									4.0									4.0
90									1.9									1.9
95									1.1									1.1
100									4.3	1.9								6.2
105									2.4	1.9								4.2
110									.8									.8
115																		
SUM									29.7	6.8								36.5

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	21.2	.1								21.7
40								.2	7.4	.7								8.3
60								.1	5.4	.5								5.9
70									5.0	.3								5.4
75									14.3	.5								14.8
80									21.9	.3								22.3
85									19.2	.2								19.5
90									35.6	.1								35.7
95									45.0	.7								45.6
100									50.9	.2								51.1
105									18.7									18.7
110								1.0	15.9	1.7								18.7
115									11.9	3.9								15.7
120									3.5	2.6								6.1
125																		
SUM								1.7	276.0	11.8								289.4

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									.2	.2								.4
40									.4									.4
60									.7									.7
70									.3									.3
75									1.7									1.7
80									2.4									2.4
85									4.2									4.2
90									10.9									10.9
95									19.2									19.2
100									16.3									16.3
105									5.4									5.4
110									.9	.1								1.0
115										.7								.7
120									.0	.0								.1
125										.0								.0
SUM									62.6	1.1								63.7

TABLE XLIX - Continued

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
85																		
90									.3									.3
95									.3	.2								.5
100									.4									.4
105																		
SUM									1.0	.2								1.2

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	24.1	.3								24.8
40								.2	13.1	.7								14.0
60								.1	8.0	2.1								10.2
70									5.9	.7								6.6
75									17.2	1.5								18.7
80									30.7	.6								31.4
85									27.5	.2								27.7
90									48.9	.1								49.0
95									65.7	.9								66.6
100									73.6	2.1								75.6
105									29.9	1.9								31.8
110								1.0	22.0	1.9								24.9
115									11.9	4.5								16.4
120									3.5	2.7								6.2
125										.0								.0
SUM								1.7	382.0	20.1								403.8

MINUTES FOR CYCLIC LA VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.0									3.0
40									1.5									1.5
60									.7									.7
70									.9									.9
75									1.3									1.3
80									2.7									2.7
85									8.0	.1								8.1
90									21.9	.1								22.0
95									7.9									7.9
100									11.6									11.6
105									6.6									6.6
110									2.4									2.4
115																		
SUM									68.7	.2								68.9

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.6	27.9									28.5
40								.4	17.6									18.0
60									9.7	.3								10.0
70									2.7	.5								3.1
75									3.0	.4								3.4
80									6.3	.6								6.9
85									6.2	.7								6.9
90									21.7	.4								22.0
95									36.3	1.7								38.0
100									29.0	4.8								33.8
105									27.6	11.7								39.2
110									15.5	.6								16.1
115									1.0									1.0
120																		
SUM								.9	204.5	21.6								227.0

MINUTES FOR CYCL C LAT VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -3[illegible]

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.8	65.9	1.2								68.9
40								.2	35.4	.3								35.9
60								.1	31.0	.2								31.3
70								.1	16.5	.2								16.8
75									26.1	2.0	.3							28.4
80									54.8	5.4								60.2
85									53.3	11.9	.2							65.4
90									89.3	13.6								102.8
95									184.1	21.4	1.7							207.2
100									142.2	8.5								150.6
105								1.2	95.9	1.9								99.0
110								2.1	49.5	2.2								53.8
115								1.4	21.2	4.7								27.3
120							.1	.6	2.5	.9								4.0
125								.0										.0
SUM							.1	7.6	867.7	74.2	2.1							951.7

TABLE XLIX - Continued

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									25.4	.2								25.6
40									10.9	1.6								12.5
60									13.4	2.0								15.4
70									14.9	1.2	.3							16.3
75									15.6	2.7	1.7							19.9
80									32.9	3.7	2.1							38.7
85									50.0	10.9	6.7							67.6
90									51.4	8.6	4.7							64.7
95									66.3	8.7	.1							75.1
100									37.6	10.6								48.2
105									22.9	5.3								28.2
110									13.2	3.9								17.1
115									3.6	1.3								4.8
120									.1	.6								.7
125										.1								.1
SUM									358.2	61.2	15.6							434.9

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS																		
40									2.7									2.7
60									3.3									3.3
70									1.2									1.2
75									1.5									1.5
80									2.2	.2								2.5
85									3.0	.3								3.3
90									4.7	1.0								5.6
95									16.5	1.9								18.4
100									19.6	.8								20.4
105									4.3									4.3
110									.6									.6
115																		
SUM									59.5	4.2								63.8

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS																		
40									.1									.1
60									.3									.3
70									.5									.5
75									.2	.1								.4
80									.6	.1								.7
85									.1	.4								.5
90									.6	.8								1.4
95									.4	1.2								1.5
100																		
SUM									2.8	2.6								5.4

MINUTES FOR CYCLIC LAT AIRSPEED BY WEIGHT 7000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								2.4	122.3	1.3								126.0
40								.6	68.3	1.9								70.8
60								.1	58.4	2.4								60.9
70								.1	36.7	1.9	.3							38.9
75									47.7	5.2	1.9							54.8
80									99.6	10.0	2.1							111.7
85									120.7	24.3	6.9							151.8
90									189.5	24.3	4.7							218.6
95									311.4	34.9	1.8							348.1
100									240.0	24.7								264.7
105								1.2	157.2	18.9								177.3
110								2.1	81.2	6.7								90.1
115								1.4	25.9	5.9								33.2
120							.1	.6	2.6	1.5								4.7
125								.0		.1								.1
SUM							.1	8.5	1561.4	164.0	17.7							1751.7

TABLE XLIX - Continued

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-400	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.1									3.1
40									4.6	.3	.7							5.6
60									3.3									3.3
70									1.0			.1						1.2
75									1.3	.6								1.9
80									1.8	.6								2.4
85									2.9	2.2		.1						5.1
90									6.0	.6								6.6
95									13.7	.2								13.9
100									1.3									1.3
105									.3									.3
110																		
SUM									39.3	4.5	.7	.2						44.7

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	2.1	10.2	1.8								14.2
40									10.8	1.0								11.8
60									7.7	.5								8.2
70									5.4	.1	.3							5.8
75									7.6	.7								8.3
80									10.1	.5								10.6
85									17.7	.9	.8	1.0						20.5
90									23.7	1.3	1.5	.8						27.3
95									40.6	4.0	.9	.7						46.1
100									46.8	32.6	5.0	1.9						86.4
105								.1	25.3	24.6	17.6							67.6
110									2.9	4.6	12.5							20.1
115									1.0	.5	.2							1.7
120																		
SUM							.1	2.2	209.8	73.1	38.9	4.4						328.6

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									44.0									44.0
40									9.8									9.8
60									7.3	.4								7.6
70									7.7	1.3								9.0
75									16.4	.5	1.7							18.7
80									21.7	4.1	1.0	.5						27.3
85									43.3	8.1	.7	.3						52.4
90									65.9	13.5	2.1	.2						81.7
95									96.8	12.4	4.7							113.9
100									116.6	8.7	.5							125.8
105									33.3	.2	.8							34.3
110									3.1	.1	.7							3.9
115										.1								.1
120																		
SUM									465.8	49.4	12.3	1.0						528.6

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									12.3	.2								12.5
40									12.1	.3								12.4
60									13.1	1.2								14.3
70									13.9	1.3								15.1
75									20.5	4.3	.2							25.0
80									36.8	10.8	2.2							49.8
85									53.2	20.2	5.0							78.4
90									32.0	11.7	2.6							46.3
95									29.1	7.8	5.5							42.5
100									15.2	4.8	.7							20.8
105									5.8	.3	.8							6.9
110									1.6	.2	.1							2.0
115									.2	.2								.4
120										.2								.2
125																		
SUM									246.0	63.4	17.1							326.5

TABLE XLIX - Continued

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	2.1	69.6	2.0								73.8
40									37.3	1.6	.7							39.7
60									31.4	2.1								33.4
70									27.9	2.7	.3	.1						31.1
75									45.9	6.1	2.0							53.9
80									70.4	16.0	3.2	.5						90.1
85									117.1	31.4	6.6	1.4						156.5
90									127.6	27.1	6.2	1.0						161.9
95									180.2	24.4	11.1	.7						216.3
100									179.9	46.1	6.3	1.9						234.2
105								.1	64.8	25.0	19.2							109.1
110									7.7	4.9	13.4							25.9
115									1.2	.8	.2							2.2
120										.2								.2
125																		
SUM							.1	2.2	960.9	190.4	69.1	5.7						1228.4

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.9									3.9
40									2.1									2.1
60									2.4									2.4
70									1.2	.5								1.7
75									1.5	.2								1.7
80									4.1	3.2								7.3
85									2.9	1.1								4.1
90									1.1	.5								1.6
95									.6	.9								1.6
100									.7	1.4								2.1
105									5.0	3.4								8.5
110									12.2	11.0								23.2
115									4.7	2.3								7.0
120									.3	.3								.6
125																		
SUM									42.9	24.8								67.7

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.3	5.7									6.0
40								.3	1.3									1.6
60								.1	1.8									1.9
70									2.0		.2							2.1
75									2.4	1.7	1.4							5.4
80									4.0	5.1	.8							10.0
85									12.8	1.2	1.4	.5						16.0
90									6.1	.1	1.0							7.1
95									6.7	.1								6.9
100									8.5	1.2								9.7
105									4.1	10.2	1.3							15.6
110									11.2	20.3	8.1							39.7
115									5.7	9.4	2.5							17.6
120									.8		.2							.9
125																		
SUM								.7	73.1	49.2	16.9	.5						140.4

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									9.4									9.4
40									10.3									10.3
60									8.3									8.3
70									10.2	.5								10.6
75									9.3	2.5								11.8
80									9.4	3.9	6.8							20.1
85									17.4	13.7	2.5	.1						33.6
90									27.8	.6	6.0							34.4
95									16.6	3.6								20.1
100									27.5	33.3								60.8
105									5.7	4.1								9.8
110									.8									.8
115									.1									.1
120																		
SUM									152.6	62.2	15.2	.1						230.1

TABLE XLIX - Concluded

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									.6									.6
40									.4									.4
60									.8									.8
70									.4									.4
75									2.4		3.1							5.5
80									13.6	8.3								21.9
85									21.1	15.7	9.7	3.1						49.7
90									3.1	15.4	7.2	2.2						27.9
95									9.8		1.4							11.2
100									10.7									10.7
105									1.9									1.9
110																		
SUM									64.8	39.4	21.5	5.3						131.1

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.3	19.6									19.8
40								.3	14.0									14.3
60								.1	13.3									13.5
70									13.8	1.0	.2							15.0
75									15.6	4.4	4.4							24.4
80									31.1	20.5	7.6							59.2
85									54.3	31.7	13.7	3.7						103.4
90									38.1	16.6	14.2	2.2						71.0
95									33.7	4.6	1.4							39.7
100									47.4	35.9								83.3
105									16.7	17.7	1.3							35.8
110									24.2	31.4	8.1							63.7
115									10.6	11.7	2.5							24.7
120									1.1	.3	.2							1.5
125																		
SUM								.7	333.4	175.7	53.6	5.9						569.3

MINUTES FOR CYCLIC LAT VS AIRSPEED BY WEIGHT SUM. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS							.1	5.2	239.5	3.6								244.4
40								1.1	132.8	4.2	.7							138.8
60								.3	111.1	6.6								118.1
70								.1	84.3	6.3	.8	.1						91.6
75									126.3	17.2	8.3							151.9
80									231.8	47.2	12.9	.5						292.4
85									319.5	87.6	27.2	5.1						439.4
90									404.0	68.1	25.1	3.2						500.4
95									590.9	64.7	14.3	.7						670.7
100									540.9	108.7	6.3	1.9						657.9
105								1.3	268.6	63.5	20.5							353.9
110								3.1	135.1	44.8	21.5							204.6
115								1.4	49.5	22.9	2.6							76.4
120							.1	.6	7.2	4.6	.2							12.8
125								.0		.1								.2
SUM							.2	13.1	3237.6	550.2	140.5	11.6						3953.2

TABLE L. TIME FOR COLLECTIVE BOOST TUBE STEADY LOAD VERSUS AIRSPEED BY WEIGHT AND ALTITUDE

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									1.1									1.1
40									.5	.1	.3							.8
60									.2	.2								.4
70									.3									.3
75																		
80									.4									.4
85									.1									.1
90									.2									.2
95									.1									.1
100								1.4	.3									1.7
105							1.7	1.7										3.4
110							2.1	2.3										4.4
115																		
SUM							3.8	5.5	3.0	.3	.3							12.9

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									1.6									1.6
40									4.3	.2								4.5
60									2.4	.7								3.2
70									.6									.6
75								.7	1.3		.2							2.2
80									4.6	1.3	.4							6.3
85									4.0									4.0
90									1.9									1.9
95									1.1									1.1
100								1.6	4.5									6.2
105							.9	1.2	2.2									4.2
110							.6	.2										.8
115																		
SUM							1.4	3.7	28.5	2.3	.5							36.5

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.2	18.8	1.1	.6							21.7
40									4.0	1.8	2.1	.3	.1					8.3
60									3.8	.3	1.4	.2	.1		.1	.2		5.9
70									3.4	.6	.6	.2	.4			.1		5.4
75									11.6	2.2	.7	.2	.1			.1		14.8
80								.1	20.3	.9	.9							22.3
85									18.4	.8	.1					.1		19.5
90									34.0	1.4	.1					.1		35.7
95								.5	44.6	.6								45.6
100								1.8	48.3	.8	.2							51.1
105							.5	4.2	13.8	.2	.1							18.7
110							.7	8.8	9.2									18.7
115							.1	6.2	9.4									15.7
120								4.7	1.4									6.1
125																		
SUM							1.3	27.5	240.9	10.7	7.0	.9	.6		.1	.6		289.4

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.1	.3									.4
40									.4									.4
60									.7									.7
70									.2		.1							.3
75								.1	1.3	.2	.2							1.7
80								.1	1.6	.6	.1							2.4
85							.1	.1	3.8	.1		.1						4.2
90							.4	.2	10.1	.2								10.9
95								.1	19.1									19.2
100									16.3									16.3
105								.4	5.0									5.4
110								.8	.2									1.0
115								.1	.6									.7
120									.1									.1
125									.0									.0
SUM							.5	1.9	59.7	1.1	.4	.1						63.7

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
85																		
90									.3									.3
95									.5									.5
100									.4									.4
105																		
SUM									1.2									1.2

TABLE L - Continued

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 6000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								1.3	21.7	1.1	.6							24.8
40									9.1	2.1	2.4	.3	.1					14.0
60									7.1	1.2	1.4	.2	.1		.1	.2		10.2
70									4.6	.6	.7	.2	.4			.1		6.6
75								.8	14.1	2.4	1.0	.2	.1			.1		18.7
80								.2	26.9	2.9	1.4							31.4
85							.1	.1	20.3	.9	.1	.1				.1		27.7
90							.4	.2	46.5	1.6	.1					.1		49.0
95								.6	65.4	.6								66.6
100								4.9	69.8	.8	.2							75.6
105							3.1	7.4	21.0	.2	.1							31.8
110							3.4	12.1	9.4									24.9
115							.1	6.3	10.0									16.4
120								4.7	1.5									6.2
125									.0									.0
SUM							7.0	38.6	333.4	14.4	8.3	1.0	.6		.1	.6		403.8

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									2.6	.4								3.0
40									1.0	.6								1.5
60									.4	.3								.7
70									.8	.1								.9
75									1.1	.3								1.3
80									2.7									2.7
85									7.9	.2								8.1
90								1.7	19.8	.4								22.0
95								.6	6.9	.4								7.9
100							.5	9.7	1.3	.1	.0							11.6
105							2.6	2.0	2.0	.1								6.6
110								.5	1.9									2.4
115																		
SUM							3.1	14.5	48.4	2.9	.0							68.9

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.7	25.3	2.4								28.5
40								.1	15.3	2.2	.3							18.0
60								.0	9.5	.2	.2							10.0
70								.0	2.8	.3								3.1
75								.1	3.1	.2								3.4
80							.4	.1	6.3	.1								6.9
85							1.1	1.5	4.3	.0								6.9
90							1.0	10.7	10.3									22.0
95							.9	11.3	25.8	.0								38.0
100							3.7	11.4	18.6	.1	.1							33.8
105							7.3	8.0	23.4									39.2
110							5.4	4.2	6.5									16.1
115								.8	.3									1.0
120																		
SUM							20.2	49.1	151.5	5.6	.6							227.0

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS					.0	.1	1.9	2.0	96.2	5.7	2.1	.9						68.9
40								.3	12.7	8.5	8.8	3.5	1.7		.4			39.9
60								.4	14.0	7.7	5.6	2.4	.8	.1	.2			31.3
70								.8	8.8	3.9	2.6	.5	.3					16.8
75								.5	21.8	4.7	.5	.8	.0	.0				28.4
80							2.7	1.2	50.3	4.0	1.6	.3	.0	.0				60.2
85						.5	4.2	2.0	53.4	3.7	1.2	.4						65.4
90						.6	6.5	4.2	90.0	.6	.5	.5						102.8
95						.1	15.6	12.5	177.1	1.3	.5							207.2
100						1.3	9.5	18.6	120.8	.4								150.6
105						2.3	7.1	13.6	76.0									99.0
110							7.9	22.2	23.7	.1								53.8
115						.2	4.0	12.3	10.9									27.3
120							.1	2.8	1.1									4.0
125								.0										.0
SUM					.0	5.1	59.5	93.4	716.8	40.6	23.3	9.4	2.9	.2	.6			951.7

TABLE L - Continued

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	20.5	4.3		.4						25.6
40									8.0	3.2	.5	.4	.4					12.5
60								.3	11.4	1.3	1.0	.8	.5	.2				15.4
70								.3	13.4	1.0	.6	.4	.5	.2				16.3
75								.7	16.4	1.2	.4	.5	.2	.4	.0	.1		19.9
80								1.1	34.8	1.7	.3	.3	.1	.1		.2	.1	38.7
85							.1	2.4	63.5	.8	.5	.2			.0			67.6
90						.7	.1	1.2	61.9	.4	.2	.0			.0			64.7
95						1.1	1.1	1.5	70.9		.2	.3	.1					75.1
100						.6	.6	1.1	45.0	.8	.1	.0						48.2
105						2.6	.4	2.8	21.9	.5		.0						28.2
110						2.4	7.0	2.8	4.9									17.1
115							.1	.4	4.4									4.8
120								.5	.2									.7
125									.1									.1
SUM						7.3	9.4	15.7	377.3	15.2	3.8	3.3	1.7	.8	.1	.3	.1	434.9

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	[illegible]0	200	250	300	350	400	450	SUM
LESS																		
40								.1	2.6									2.7
60								.6	2.7									3.3
70								.2	1.0									1.2
75								.2	1.2									1.5
80								1.1	1.4									2.5
85								.3	3.0									3.3
90							.6	.2	4.8	.1								5.6
95							.1	.1	18.1	.1								18.4
100									20.4									20.4
105									4.3									4.3
110									.6									.6
115																		
SUM							.7	2.9	60.0	.2								63.8

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE 6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS																		
40									.1									.1
60									.3									.3
70									.5									.5
75									.4									.4
80								.4	.3									.7
85								.4	.1									.5
90								.6	.8									1.4
95									1.5									1.5
100																		
SUM								1.5	4.0									5.4

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 7000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS					.0	.1	1.9	3.1	104.6	12.9	2.1	1.3						126.0
40								.6	39.7	14.5	9.5	4.0	2.1		.4			70.8
60								1.4	38.3	9.5	6.7	3.2	1.3	.3	.2			60.9
70								1.4	27.3	5.3	3.2	.8	.8	.2				38.9
75								1.5	44.0	6.3	.9	1.3	.2	.4	.0	.1		54.8
80							3.1	4.0	95.8	5.8	1.9	.6	.1	.1		.2	.1	111.7
85						.5	5.4	6.7	132.3	4.8	1.7	.5			.0			151.8
90						1.3	8.2	18.7	187.5	1.5	.8	.6			.0			218.6
95						1.2	17.7	26.0	300.4	1.9	.7	.3	.1					348.1
100						1.9	14.3	40.7	206.1	1.4	.2	.0						264.7
105						4.9	17.9	26.4	127.5	.5		.0						177.3
110						2.4	20.2	29.8	37.6	.1								90.1
115						.2	4.1	13.4	15.5									33.2
120							.1	3.3	1.3									4.7
125								.0	.1									.1
SUM					.0	12.3	92.9	177.0	1358.0	64.5	27.7	12.7	4.6	1.0	.7	.3	.1	1791.7

TABLE L - Continued

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.1									3.1
40								1.0	3.9	.6								5.6
60									2.9	.4								3.3
70								.1	.7	.4								1.2
75									1.8	.1								1.9
80									2.4	.0								2.4
85									5.1									5.1
90									6.6		.0							6.6
95									12.6	1.3	.0							13.9
100									1.3									1.3
105								.3										.3
110																		
SUM								1.5	40.2	2.9	.1							44.7

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	13.3	.5	.1							14.2
40								.8	9.0	1.9	.1							11.8
60								1.3	5.9	.8	.1	.1						8.2
70								.8	4.9	.1								5.8
75							.4	1.0	6.5	.2	.2							8.3
80							.3	1.8	7.9	.6								10.6
85							1.0	3.6	15.8	.0	.1							20.5
90							1.0	5.3	20.9									27.3
95							1.4	6.6	38.1									46.1
100							5.6	48.8	31.9	.0								86.4
105							8.0	37.0	22.6	.0								67.6
110							4.4	13.7	1.9									20.1
115								.7	1.0									1.7
120																		
SUM							22.1	121.8	179.8	4.2	.6	.1						328.6

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									43.0	.6	.4							44.0
40								1.7	4.4	1.3	1.6	.7	.2					9.8
60							.3	.7	4.9	.6	.4	.5	.2					7.6
70							.4	.8	7.0	.4	.3	.2						9.0
75								.9	16.6	.6	.5	.1						18.7
80								3.0	22.8	1.4	.1							27.3
85							.2	1.5	50.6	.1		.1						52.4
90							.3	3.3	77.4	.2	.6							81.7
95							.3	10.2	103.2	.1								113.9
100								3.7	121.7	.1	.2							125.8
105							.7	.4	33.2									34.3
110							.1	.6	3.2									3.9
115									.1									.1
120																		
SUM							2.3	26.8	488.1	5.4	4.1	1.5	.4					528.5

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									12.0	.4	.1							12.5
40							.2	.9	5.7	3.3	1.2	.7	.4					12.4
60							.6	.2	10.3	1.3	1.2	.5	.2	.1				14.3
70							.3	1.4	11.6	1.3	.3	.2		.1				15.1
75								3.9	19.4	.9	.6	.2		.0				25.0
80								12.8	35.9	.5	.4		.1	.0				49.8
85							1.9	37.0	37.3	1.4	.1	.1						78.4
90							1.8	9.0	39.1	.3	.1							48.3
95							2.9	16.5	22.7	.1	.2							42.5
100							.3	5.9	14.3	.2	.2							20.8
105								.8	5.7	.3	.2							6.9
110									2.0									2.0
115									.4									.4
120									.2									.2
125																		
SUM							8.1	88.9	212.7	9.9	4.5	1.5	.6	.3				326.5

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 8000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS								.4	71.3	1.5	.6							73.8
40							.2	4.4	23.0	7.1	2.9	1.4	.6					39.7
60							.9	2.2	24.1	3.2	1.7	.9	.3	.1				33.4
70							.7	3.1	24.2	2.2	.6	.4		.1				31.1
75							.4	5.8	44.3	1.8	1.3	.3		.0				53.9
80							.3	17.0	69.0	2.5	.5		.1	.0				90.1
85							3.1	42.6	100.9	1.5	.2	.2						150.5
90							3.1	17.6	140.0	.4	.7							161.9
95							4.6	33.5	170.7	1.5	.2							210.3
100							5.8	58.4	169.2	.3	.4							234.2
105							8.6	38.5	61.5	.3	.2							109.1
110							4.5	14.3	7.1									25.9
115								.7	1.5									2.2
120									.2									.2
125																		
SUM							32.4	239.1	920.8	22.4	9.3	3.1	1.0	.3				1228.4

TABLE L - Continued

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE LESS

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									3.9									3.9
40									2.1									2.1
60									2.4									2.4
70									1.7									1.7
75									1.6	.0								1.7
80									7.2	.1								7.3
85									3.9	.2								4.1
90									1.6									1.6
95									1.6									1.6
100								.5	1.6									2.1
105								.8	7.7									8.5
110								.9	22.4									23.2
115									7.0									7.0
120									.6									.6
125																		
SUM								2.2	65.2	.3								67.7

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -6000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									5.8	.2								6.0
40									1.3		.3							1.6
60									1.8	.1								1.9
70									2.1									2.1
75									5.1	.3								5.4
80								.1	9.4	.5								10.0
85									15.8	.2								16.0
90									6.9	.2								7.1
95									6.7		.1							6.8
100								.8	9.0									9.7
105								2.2	13.4									15.6
110								4.7	34.8	.3								39.7
115								2.1	15.5									17.6
120									.9									.9
125																		
SUM								9.8	128.5	1.8	.4							140.4

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE -3000

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									8.7	.7								9.4
40									8.2	1.8	.3							10.3
60									7.7	.6								8.3
70									10.3	.3								10.6
75									11.7	.1								11.8
80								3.7	16.4									20.1
85							.1	2.3	31.2									33.6
90								4.2	30.2									34.4
95								.8	19.3									20.1
100								8.0	52.8									60.8
105								2.1	7.8									9.8
110									.8									.8
115									.1									.1
120																		
SUM							.1	21.1	205.2	3.5	.3							230.1

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE 0

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									.6									.6
40									.1		.3							.4
60									.1	.4	.3							.8
70									.2	.3								.4
75								3.1	2.4									5.5
80							1.9	11.7	8.3									21.9
85							4.8	34.2	10.6									49.7
90							7.9	15.4	4.6									27.9
95								2.2	9.0									11.2
100								.7	10.0									10.7
105									1.9									1.9
110																		
SUM							14.7	67.3	47.9	.7	.5							131.1

TABLE L - Concluded

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT 9000. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS									19.0	.9								19.8
40									11.7	1.8	.8							14.3
60									12.0	1.2	.3							13.5
70									14.4	.6								15.0
75								3.1	20.8	.5								24.4
80							1.9	15.4	41.3	.6								59.2
85							4.9	36.5	61.5	.4								103.4
90							7.9	19.6	43.3	.2								71.0
95								3.0	36.6		.1							39.7
100								10.0	73.3									83.3
105								5.0	30.7									35.8
110								5.6	57.9	.3								63.7
115								2.1	22.6									24.7
120									1.5									1.5
125																		
SUM							14.8	100.4	446.7	6.3	1.1							569.3

MINUTES FOR COLLECTIVE VS AIRSPEED BY WEIGHT SUM. BY ALTITUDE SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
LESS					.0	.1	1.9	4.8	216.6	16.4	3.2	1.3						244.6
40							.2	5.0	83.5	25.5	15.7	5.6	2.8		.4			138.8
60							.9	3.6	81.6	15.1	10.1	4.3	1.6	.4	.2	.2		118.1
70							.7	4.5	70.4	8.6	4.4	1.4	1.1	.3		.1		91.6
75							.4	11.2	123.2	11.0	3.2	1.8	.3	.5	.0	.2		151.9
80							5.4	37.2	232.9	11.8	3.9	.6	.2	.2		.2	.1	292.4
85						.5	13.5	85.9	329.0	7.6	2.0	.8			.0	.1		439.4
90						1.3	19.6	56.2	417.3	3.7	1.6	.6			.0	.1		500.4
95						1.2	22.3	62.9	579.0	4.0	1.0	.3	.1					670.7
100						1.9	20.2	114.0	518.5	2.5	.8	.0						657.9
105						4.9	29.6	77.4	240.7	1.1	.3	.0						353.9
110						2.4	28.1	61.7	112.0	.4								204.6
115						.2	4.2	22.5	49.6									76.4
120							.1	8.0	4.5									12.6
125								.0	.1									.2
SUM					.0	12.3	147.0	555.0	3058.9	107.6	46.4	16.8	6.1	1.3	.7	.8	.1	3953.2

TABLE LI. TIME FOR LONGITUDINAL CYCLIC BOOST TUBE STEADY LOAD VERSUS LATERAL CYCLIC BOOST TUBE LOAD BY COLLECTIVE BOOST TUBE STEADY LOAD

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT -300

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									.0									.0
100																		
SUM									.0									.0

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT -250

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									8.0			4.3						12.2
100										.1								.1
150																		
SUM									8.0	.1		4.3						12.3

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT -200

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									60.2	7.3	15.3	18.9	.1					101.7
100									23.4	.9	2.9							27.2
150									7.6	4.4	3.9							15.9
200										2.1	.1							2.2
250																		
SUM									91.2	14.7	22.1	18.9	.1					147.0

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT -150

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-200																		
-150												2.3	.0					2.3
-100							.1	.1	112.3	88.8	90.8	44.2	.1					336.4
100									64.2	35.7	31.6							131.5
150								.4	28.5	31.4	16.9							77.3
200									4.3		3.2							7.4
250																		
SUM							.1	.5	209.2	156.0	142.6	46.5	.1					555.0

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT -100

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-250																		
-200									.1			.1						.2
-150									3.0	1.0	.2	4.3	.1					8.5
-100								5.1	1165.4	961.1	382.8	95.4	1.2					2611.0
100									245.2	89.2	53.2	1.8	.4	.2				389.9
150									25.7	11.0	10.6			.1				47.3
200									1.3	.1	.5							1.9
250																		
SUM								5.1	1440.7	1062.3	447.4	101.5	1.7	.3				3058.9

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 100

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-200																		
-150									1.3	.5								1.8
-100									47.3	30.1	24.9	1.6	.7					104.5
100									.6	.8								1.3
150																		
SUM									49.1	31.3	24.9	1.6	.7					107.6

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 150

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-200																		
-150									.1	.4								.5
-100									20.6	17.3	6.5	1.5	.1					45.9
100																		
SUM									20.7	17.7	6.5	1.5	.1					46.4

TABLE LI - Concluded

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 200

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									8.7	6.7	1.1	.2	.1					16.8
100																		
SUM									8.7	6.7	1.1	.2	.1					16.8

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 250

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									3.0	1.9	.7	.5						6.1
100																		
SUM									3.0	1.9	.7	.5						6.1

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 300

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									.6	.5	.2							1.3
100																		
SUM									.6	.5	.2							1.3

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 350

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									.1	.5	.1							.7
100																		
SUM									.1	.5	.1							.7

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 400

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									.5	.1								.6
100									.2									.2
150																		
SUM									.7	.1								.8

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT 450

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-150																		
-100									.1									.1
100																		
SUM									.1									.1

MINUTES FOR CYCLIC LONG VS CYCLIC LAT BY COLLECT SUM

	LESS	-450	-400	-350	-300	-250	-200	-150	-100	100	150	200	250	300	350	400	450	SUM
-250																		
-200									.1			.1						.2
-150									4.3	1.9	.7	6.5	.1					13.1
-100							.1	5.2	1426.7	1114.2	522.5	166.6	2.4					3237.6
100									333.5	126.6	87.2	1.8	.4	.2				550.2
150								.4	61.8	46.8	31.4			.1				140.5
200									5.6	2.2	3.8							11.6
250																		
SUM							.1	5.6	1832.1	1291.7	645.6	175.0	2.9	.3				3953.2

TABLE LII. LONGITUDINAL CYCLIC BOOST TUBE LOAD PEAKS FOR AIRSPEED VERSUS INCREMENTAL LONGITUDINAL CYCLIC BOOST TUBE LOAD BY MISSION SEGMENT

VELOCITY VS CY-LNG PEAKS BY MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200	1															1
-150	8	1														9
-100																
100	15	8	14	6	5	7	6	5	5	4	3	1				79
150	6	8	3	6	8	4	6	6	3	4	1	1				56
200	3	3	1	2	2	1	2	1	1	1	3	4	1			25
250		1				1					1		1		1	5
300							1									1
350																
400																
450																
SUM	33	21	18	14	15	13	15	12	9	9	8	6	2		1	176
TIME	62.8	54.6	59.0	45.7	71.3	104.8	116.3	123.4	127.5	76.2	53.2	27.0	10.4	1.1	.3	933.5

VELOCITY VS CY-LNG PEAKS BY MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150			1													1
-100																
100		1	1		1				2							5
150	1	2	1	2	1		1									8
200	2	4						1								7
250																
300					1											1
350							1									1
400																
450																
SUM	3	7	3	2	3		2	1	2							23
TIME	5.7	8.7	7.7	6.2	5.6	4.6	5.1	6.7	4.9	2.6	2.0	1.3	.2	0.0	0.0	61.3

VELOCITY VS CY-LNG PEAKS BY MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150	6															6
-100																
100	19	1	2	1	1	9	1	6	13	6	9	2	2			72
150	9	1	1	2	1	2	5	5	7	9	3	1	1			47
200	5		1	1	1	5	3		2		1	5	1	1		26
250						1	1						2			4
300																
350																
400																
450																
SUM	39	2	4	4	3	17	10	11	22	15	13	8	6	1		155
TIME	53.2	71.7	40.3	25.1	35.6	61.4	73.0	87.4	115.9	108.7	83.4	74.9	57.4	8.3	.2	896.4

TABLE LII - Concluded

VELOCITY VS CY-LNG PEAKS BY MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150	2									1						3
-100																
100	2		1													3
150	1															1
200																
250																
300																
350																
400																
450																
SUM	5		1							1						7
TIME	180.7	26.4	31.0	31.5	64.9	166.1	320.4	442.4	663.9	676.3	398.1	268.3	131.9	14.6	0.0	3416.4

TABLE LIII. LATERAL CYCLIC BOOST TUBE LOAD PEAKS FOR AIRSPEED VERSUS INCREMENTAL LATERAL CYCLIC BOOST TUBE LOAD BY MISSION SEGMENT

VELOCITY VS CY-LAT PEAKS BY MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200	1															1
-150	2											1		1		4
-100																
100	2		5	2	2	7	3	6	5	9	8	1	2	1		53
150				2	2		2			1						7
200						1	2									3
250																
300																
350																
400																
450																
SUM	5		5	4	4	8	7	6	5	10	8	2	2	2		68
TIME	62.8	54.6	59.0	45.7	71.3	104.8	116.3	123.4	127.5	76.2	53.2	27.0	10.4	1.1	.3	933.5

VELOCITY VS CY-LAT PEAKS BY MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100																
100	2			1	1	2	1	1								8
150												1				1
200							1									1
250																
300																
350																
400																
450																
SUM	2			1	1	2	2	1				1				10
TIME	5.7	8.7	7.7	6.2	5.6	4.6	5.1	6.7	4.9	2.6	2.0	1.3	.2	0.0	0.0	61.3

VELOCITY VS CY-LAT PEAKS BY MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200	1															1
-150	7	3	1								1		1	1		14
-100																
100	3		1		2	1	7	5	5	2		2			1	29
150						1				1			1			3
200								1			1					2
250																
300																
350																
400																
450																
SUM	11	3	2		2	2	7	6	5	3	2	2	2	1	1	49
TIME	53.2	71.7	40.3	25.1	35.6	61.4	73.0	87.4	115.9	108.7	83.4	74.9	57.4	8.3	.2	896.4

TABLE LIV. COLLECTIVE BOOST TUBE LOAD PEAKS FOR AIRSPEED VERSUS INCREMENTAL COLLECTIVE BOOST TUBE LOAD BY MISSION SEGMENT

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250	1									1						2
-200		1	1	1	1		2	4	2	2		2	2			18
-150	3		2	1	5		5	5	6	7	8	3	1	1		47
-100																
100	2		2		1	1		1								7
150									1							1
200				1												1
250																
300																
350																
400																
450																
SUM	6	1	5	3	7	1	7	10	9	10	8	5	3	1		76
TIME	62.8	54.6	59.0	45.7	71.3	104.8	116.3	123.4	127.5	76.2	53.2	27.0	10.4	1.1	.3	933.5

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250	1						1	1								3
-200				1												1
-150	1										1	1				3
-100																
100	1	1	4		2			1	1							10
150				1			1	1	1		1					5
200			1				1									2
250					1	1	1									3
300																
350				1		1		1								3
400					2											2
450																
SUM	3	1	5	3	5	2	4	4	2		2	1				32
TIME	5.7	8.7	7.7	6.2	5.6	4.6	5.1	6.7	4.9	2.6	2.0	1.3	.2	0.0	0.0	61.3

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250										1		1				2
-200							2	2	1	4		5				14
-150	2	1	1	2			1	1	2	4	2	3				19
-100																
100	1	11	12	2	2	5	4	2	2	2	1					44
150		18	18	6	3	4	2		2	3	1					57
200		6	14	2	4	2		1								29
250		1	7	2	1	1										12
300			3		1	1										5
350			1		1											2
400																
450																
SUM	3	37	56	14	12	13	9	6	7	14	4	9				184
TIME	53.2	71.7	40.3	25.1	35.6	61.4	73.0	87.4	115.9	108.7	83.4	74.9	57.4	8.3	.2	896.4

TABLE LIV - Concluded

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150	2															2
-100																
100								1								1
150		1														1
200																
250																
300																
350																
400																
450																
SUM	2	1						1								4
TIME	180.7	26.4	31.0	31.5	64.9	166.1	320.4	442.4	663.9	676.3	398.1	268.3	131.9	14.6	0.0	3416.4

TABLE LV. GUST n_Z PEAKS FOR μ VERSUS n_Z BY MISSION SEGMENT, ALTITUDE AND C_T/σ

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					2			2
1.2				1	3			4
0.8								
0.7				1	4			5
0.6				1				1
0.5								
SUM				3	9			12
TIME	3.6	15.4	15.4	71.3	57.9	.3	0.0	163.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
0.8								
0.7				1				1
0.6								
SUM				1				1
TIME	.5	2.3	3.3	22.6	5.1	0.0	0.0	33.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					2			2
1.2				1	3			4
0.8								
0.7				2	4			6
0.6				1				1
0.5								
SUM				4	9			13
TIME	4.1	17.6	18.8	93.8	63.1	.3	0.0	197.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				3	5			8
1.2				8	8	1		17
0.8								
0.7			1	7	7			15
0.6				1				1
0.5								
0.4					1			1
0.2								
SUM			1	19	21	1		42
TIME	3.4	6.6	12.1	91.1	64.0	3.1	0.0	200.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1				1
0.8								
0.7				1				1
0.6								
SUM				2				2
TIME	4.9	4.6	18.0	36.9	23.4	0.0	0.0	87.7

TABLE LV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				3	5			8
1.2				9	8	1		18
0.8								
0.7			1	8	7			16
0.6				1				1
0.5								
0.4					1			1
0.2								
SUM			1	21	21	1		44
TIME	8.2	11.2	30.1	128.0	107.4	3.1	0.0	288.0

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	1			3
0.8								
SUM				2	1			3
TIME	1.4	2.5	13.4	20.8	14.7	.7	0.0	53.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	1			3
0.8								
SUM				2	1			3
TIME	1.5	3.2	20.4	49.6	25.2	.7	0.0	100.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				3	7			10
1.2				12	12	1		25
0.8								
0.7			1	10	11			22
0.6				2				2
0.5								
0.4					1			1
0.2								
SUM			1	27	31	1		60
TIME	17.7	38.3	84.1	301.7	229.6	4.1	0.0	675.5

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2					1			1
0.8								
SUM					1			1
TIME	.5	.8	3.5	7.1	2.4	0.0	0.0	14.3

TABLE LV- Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	1			3
0.8								
SUM				2	1			3
TIME	0.0	.1	2.3	4.3	2.7	0)	0.0	9.5

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	2			4
0.8								
SUM				2	2			4
TIME	.5	1.2	5.8	11.4	5.1	0.0	0.0	24.0

GUST NZ PEAKS FOR MU VS .NZ BY MISSION SEGMENT MANUVK

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	2			4
0.8								
SUM				2	2			4
TIME	.5	4.8	12.2	18.0	6.8	0.0	0.0	42.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE LESS, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1					1
0.8								
0.7				1				1
0.6								
SUM			1	1				2
TIME	1.9	8.4	10.2	17.1	12.5	.4	0.0	50.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE LESS

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1					1
0.8								
0.7				1				1
0.6								
SUM			1	1				2
TIME	1.9	8.4	10.2	17.4	13.0	.6	0.0	51.6

TABLE LV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT. ALTITUDE -6000. CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2				2	2	1		5
0.8								
0.7					1			1
0.6					1			1
0.5								
SUM				3	4	1		8
TIME	2.7	11.0	15.8	51.4	66.1	7.8	0.0	154.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT. ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2				2	2	1		5
0.8								
0.7					1			1
0.6					1			1
0.5								
SUM				3	4	1		8
TIME	3.1	11.5	16.4	61.6	77.7	8.0	0.0	178.2

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT. ALTITUDE -3000. CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				4	2			6
0.8								
0.7				3	3			6
0.6					1			1
0.5								
SUM				7	6			13
TIME	3.5	7.2	14.2	54.1	105.7	8.8	0.0	193.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT. ALTITUDE -3000. CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2					1			1
0.8								
0.7				1	2			3
0.6								
SUM				1	3			4
TIME	3.0	3.8	9.3	21.9	43.4	.1	0.0	81.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT. ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				4	3			7
0.8								
0.7				4	5			9
0.6					1			1
0.5								
SUM				8	9			17
TIME	6.6	11.1	23.5	76.0	149.1	8.9	0.0	275.2

TABLE LV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	1			3
0.8								
0.7				2		1		3
0.6								
SUM				4	1	1		6
TIME	.2	2.4	6.2	12.5	15.0	.4	0.0	36.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					2			2
1.2								
0.8								
0.7					2			2
0.6								
SUM					4			4
TIME	2.3	2.2	5.6	18.4	20.4	7.9	0.0	56.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					2			2
1.2				2	1			3
0.8								
0.7				2	2	1		5
0.6								
SUM				4	5	1		10
TIME	2.4	4.6	11.8	30.9	35.4	8.4	0.0	93.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1	2			3
1.2			1	8	6	1		16
0.8								
0.7				7	8	1		16
0.6					2			2
0.5								
SUM			1	16	18	2		37
TIME	14.0	35.9	62.9	192.8	300.3	35.5	0.0	641.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					1			1
1.2					2			2
0.8								
0.7					2			2
0.6								
SUM					5			5
TIME	16.7	16.9	10.7	76.6	221.3	9.4	0.0	351.7

TABLE LV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2					3			3
0.8								
0.7				4	3			7
0.6				1				1
0.5								
SUM				5	6			11
TIME	0.0	.6	.7	57.5	158.7	7.7	0.0	225.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					1			1
1.2					5			5
0.8								
0.7				4	5			9
0.6				1				1
0.5								
SUM				5	11			16
TIME	16.7	17.5	11.4	134.1	380.0	17.1	0.0	576.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			1
1.3				1	4			5
1.2				2	33	3		38
0.8								
0.7				1	16	1		18
0.6					1			1
0.5								
SUM				4	55	4		63
TIME	11.5	4.5	2.3	120.9	423.4	10.5	0.0	572.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					1			1
1.2					6			6
0.8								
0.7								
0.6					1			1
0.5								
SUM					8			8
TIME	9.2	1.0	11.1	172.2	268.1	1.9	0.0	463.5

TABLE LV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			
1.3				1	5			6
1.2				2	39	3		44
0.8								
0.7				1	16	1		18
0.6					2			2
0.5								
SUM				4	63	4		71
TIME	20.7	5.5	13.3	293.1	691.5	12.3	0.0	1036.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2					1			1
0.8								
0.7					1			1
0.6					1			1
0.5								
SUM					3			3
TIME	3.8	2.6	6.6	116.3	99.3	6.7	0.0	235.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2					1			1
0.8								
0.7					1			1
0.6					1			1
0.5								
SUM					3			3
TIME	5.1	4.3	8.3	209.9	143.6	6.7	0.0	378.0

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			1
1.3				1	6			7
1.2				2	45	3		50
0.8								
0.7				5	22	1		28
C.6				1	3			4
0.5								
SUM				9	77	4		90
TIME	61.3	36.1	39.5	704.4	1327.7	39.4	0.0	2208.5

TABLE LV - Concluded

GUST NZ PEAKS FOR MU VS NZ

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			1
1.3				5	15			20
1.2			1	24	65	5		95
0.8								
0.7			1	22	41	2		66
0.6				3	5			8
0.5								
0.4					1			1
0.2								
SUM			2	54	128	7		191
TIME	93.5	115.2	198.7	1216.9	1864.5	79.0	0.0	3567.7

TABLE LVI. GUST n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE -3000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2								3								3
0.8																
0.7								2								2
0.6							1									1
0.5																
SUM							1	5	1							7
TIME	2.0	2.5	2.2	2.1	5.1	7.5	1.9	5.2	4.2	4.3	4.0	2.5	.2	.1	0.0	43.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2								3								3
0.8																
0.7								2								2
0.6																1
0.5																
SUM							1	5	1							7
TIME	21.7	9.3	5.0	5.4	14.8	22.3	19.5	35.8	46.8	52.9	25.8	23.9	17.4	6.2	0.0	306.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2								3								3
0.8																
0.7								2								2
0.6							1									1
0.5																
SUM							1	5	1							7
TIME	25.0	14.1	10.3	6.5	18.8	31.4	27.7	49.1	67.8	77.8	38.8	31.4	19.5	6.9	.0	425.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE -6000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									2		1					3
1.2								1					3			4
0.8																
0.7								1		1			2			4
0.6											2					2
0.5																
SUM								2	2	1	3		5			13
TIME	8.6	4.3	3.2	1.6	1.9	5.7	6.9	11.0	9.6	9.8	5.1	3.9	.3	.1	0.0	70.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE -6000, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2											1	1		1		3
0.8																
0.7										1	1	1	1			4
0.6											1					1
0.5																
SUM										1	3	2	1	1		8
TIME	8.5	10.9	3.0	1.5	2.0	1.5	1.3	2.6	8.3	9.2	11.3	4.7	7.8	.3	0.0	72.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE -6000, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2								2		4	3	2				11
0.8																
0.7								4	1	2	1					8
0.6																
SUM								6	2	6	4	2				20
TIME	14.7	3.0	3.9	.4	0.0	.1	2.3	24.4	42.9	26.0	37.9	22.8	17.3	.9	0.0	196.4

TABLE LVI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									3		1					4
1.2								3		4	4	3	3	1		18
0.8																
0.7								5	1	4	2	1	3			16
0.6											3					3
0.5																
SUM								8	4	8	10	4	6	1		41
TIME	31.9	18.8	10.6	3.6	3.9	7.4	10.6	38.1	60.8	43.1	54.5	31.6	25.4	1.3	0.0	341.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3					1		1		1	1	2		1			7
1.2			1		2	2	6	3	6	2	3	2	1			28
0.8																
0.7		2	4	3	5	4	5	1	5		5	2	1			37
0.6			1	1	1	1										4
0.5					1											1
0.4											1					1
0.2																
SUM		2	6	4	10	7	12	4	12	3	11	4	3			78
TIME	15.1	9.9	11.3	7.2	13.6	23.9	32.5	32.0	36.9	22.0	21.7	11.5	7.3	.6	.2	245.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3		1					1	1								3
1.2			2	1	2		7	3	1		2					18
0.8																
0.7		1					2	3	4	2	1					13
0.6												1				1
0.5								1								1
0.4																
SUM		2	2	1	2		10	8	5	2	3	1				36
TIME	14.5	17.4	12.4	8.5	8.4	13.0	11.4	18.1	21.5	20.5	26.7	29.9	17.6	4.9	0.0	225.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4											1					1
1.3							1				1		2			4
1.2							1	2	4	9	17	14	1	2		50
0.8																
0.7							1	1	4	7	7	4		1		25
0.6									1							1
0.5																
SUM							3	3	9	16	26	18	3	3		81
TIME	40.1	8.9	8.5	2.2	8.6	26.3	28.1	67.3	177.4	145.1	87.6	40.3	20.6	1.5	0.0	662.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4											1					1
1.3		1			1		3	1	1	1	3		3			14
1.2			3	1	4	2	14	8	11	11	22	16	2	2		96
0.8																
0.7		3	4	3	5	4	8	5	13	9	13	6	1	1		75
0.6			1	1	1	1			1			1				6
0.5					1			1								2
0.4											1					1
0.2																
SUM		4	8	5	12	7	25	15	26	21	40	23	6	3		195
TIME	71.2	37.6	33.6	18.9	31.4	63.7	72.8	118.9	236.6	187.8	136.2	82.0	45.4	7.0	.2	1143.2

TABLE LVI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2								3	1							4
0.8																
0.7									1							1
0.6																
SUM								3	2							5
TIME	6.2	5.3	9.1	8.1	9.0	11.1	12.6	6.8	14.6	5.8	2.8	3.2	2.0	.1	0.0	96.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3											2					2
1.2							2					1				3
0.8																
0.7							2				2		1			6
0.6																
SUM							4				4	1	1			11
TIME	4.2	5.5	5.0	4.2	4.0	7.5	9.6	6.6	11.6	14.3	7.9	4.7	11.4	1.2	.1	97.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3											2					2
1.2							2	3	1			1				7
0.8																
0.7			1				2		1		2		1			7
0.6																
SUM			1				4	3	2		4	1	1			16
TIME	25.6	12.5	16.2	17.5	20.3	39.0	67.8	65.5	76.9	49.3	30.9	24.6	20.0	2.0	.1	468.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 3000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2										1						1
0.8																
SUM										1						1
TIME	0.0	2.1	2.5	1.1	1.3	1.8	1.1	1.6	1.5	4.2	1.7	.1	0.0	0.0	0.0	19.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2										1						1
0.8																
SUM										1						1
TIME	0.0	2.7	3.3	1.2	1.5	2.5	3.3	5.6	19.5	24.7	12.3	31.2	16.0	0.0	0.0	123.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4											1					1
1.3		1			1		3	1	4	1	6		3			20
1.2			3	1	4	2	16	14	12	16	26	20	5	3		122
0.8																
0.7		3	5	3	5	4	10	10	15	13	17	7	5	1		98
0.6			1	1	1	1			1		3	1				9
0.5					1			1								2
0.4											1					1
0.2																
SUM		4	9	5	12	7	29	26	32	30	54	28	13	4		253
TIME	143.6	78.7	66.1	44.9	63.5	117.9	165.8	259.3	411.9	319.9	244.4	174.0	107.6	10.2	.3	2207.0

TABLE LVI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
0.8																
0.7							1									1
0.6																
SUM							1									1
TIME	[illegible]	[illegible]	1.0	1.0	.4	.9	1.2	.9	3.0	2.2	1.2	.3	0.0	0.0	0.0	19.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
0.8																
0.7							1									1
0.6																
SUM							1									1
TIME	[illegible]7.4	9.0	4.6	1.7	2.6	3.8	6.0	7.6	15.5	3.4	1.6	.3	0.0	0.0	0.0	73.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -6000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3												1				1
1.2						1		1		1						3
0.8																
0.7							2	1		1						4
0.6							1									1
0.5																
SUM						1	3	2		2		1				9
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.4	14.7	14.9	23.8	11.9	10.1	2.2	.2	.1	.1	108.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -6000, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3								1								1
1.2								2								2
0.8																
SUM								3								3
TIME	.7	6.3	3.1	1.1	2.5	3.6	9.9	15.7	20.1	15.4	8.0	7.8	1.5	.3	0.0	99.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -6000, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3												1				1
1.2									2	2	1					5
0.8																
0.7						1	1	2	2	3						9
0.6								1								1
0.5																
SUM						1	1	3	4	5	1	1				16
TIME	18.[illegible]	[illegible]	.3	2.6	5.6	13.9	25.5	44.0	52.6	107.1	93.4	56.3	23.4	4.6	0.0	451.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3								1				2				3
1.2						1		3	2	3	1					10
0.8																
0.7						1	3	3	2	4						13
0.6							1	1								2
0.5																
SUM						2	4	8	4	7	1	2				28
TIME	[illegible]	[illegible]	[illegible]	8.3	13.9	26.6	49.6	74.8	97.4	134.6	111.6	66.3	25.1	5.0	.1	670.0

TABLE LVI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2						1	1									2
0.8																
0.7				1												1
0.6																
SUM				1		1	1									3
TIME	7.1	8.4	7.3	6.5	12.9	9.7	6.6	9.9	12.4	8.3	3.0	3.0	.1	0.0	0.0	95.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2							1	1		2						[illegible]
0.8																
SUM							1	1		2						[illegible]
TIME	.1	.8	1.9	1.6	.4	1.5	1.0	1.2	2.1	1.6	.8	.1	[illegible]	[illegible]	[illegible]	[illegible]

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2											1					1
0.8																
0.7								1		1	1					3
0.6																
SUM								1		1	2					4
TIME	4.6	4.3	2.5	2.2	3.3	4.2	6.2	11.5	12.3	14.0	12.2	4.4	.5	[illegible]	[illegible]	[illegible]

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3										2						2
1.2										5	6	1				12
0.8																
0.7									1	1	1	1				4
0.6										1						1
0.5																
SUM									1	9	7	2				19
TIME	33.7	1.0	2.0	4.3	8.8	24.2	53.7	85.2	139.1	153.4	64.2	23.7	22.0	0.0	0.0	615.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3										2						2
1.2						1	2	1		7	7	1				19
0.8																
0.7				1				1	1	2	2	1				8
0.6										1						1
0.5																
SUM				1		1	2	2	1	12	9	2				30
TIME	45.5	14.5	13.7	14.6	25.4	39.7	67.5	107.7	165.9	177.3	80.2	31.3	22.6	.1	0.0	805.[illegible]

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 0, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2										1						1
0.8																
0.7									1	1						2
0.6										1						1
0.5																
SUM									1	3						4
TIME	4.9	1.0	3.8	8.1	16.5	42.9	70.8	42.7	62.6	30.7	7.0	.6	[illegible]	[illegible]	[illegible]	233.6

TABLE LVI - Concluded

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2										1						1
0.8																
0.7									1	1						2
0.6										1						1
0.5																
SUM									1	3						4
TIME	12.5	12.8	14.7	16.4	25.4	51.4	81.1	54.4	76.5	37.6	10.2	2.1	.5	.2	0.0	395.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3								1		2		2				5
1.2						2	2	4	2	11	8	1				30
0.8																
0.7				1		1	4	4	4	7	2	1				24
0.6							1	1		2						4
0.5																
SUM				1		3	7	10	6	22	10	4				63
TIME	105.7	51.0	45.2	40.6	67.2	121.6	205.0	250.9	370.4	370.8	211.5	100.9	48.2	5.3	.1	1994.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2			1													1
0.8																
SUM			1													1
TIME	.4	1.6	.7	.0	.4	.9	.8	1.2	.1	.1	.2	.3	.6	.3	0.0	7.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2			1													1
0.8																
SUM			1													1
TIME	9.2	3.6	4.2	2.2	3.1	9.4	8.0	4.1	2.8	2.8	8.5	23.2	7.0	.6	0.0	88.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2			1													1
0.8																
SUM			1													1
TIME	27.9	17.4	16.3	16.4	28.0	66.0	116.3	100.6	62.4	96.3	41.8	65.2	24.7	1.5	0.0	680.7

GUST NZ PEAKS FOR VELOCITY VS NZ

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4											1					1
1.3		1			1		3	2	5	3	6	2	3			26
1.2			4	1	4	4	18	21	14	27	34	21	5	3		156
0.8																
0.7		3	5	4	5	5	14	16	19	20	19	8	5	1		124
0.6			1	1	1	1	2	1	1	2	3	1				14
0.5					1			1								2
0.4											1					1
0.2																
SUM		4	10	6	12	10	37	41	39	52	64	32	13	4		324
TIME	302.3	161.2	137.9	108.5	177.5	336.9	514.8	659.9	912.3	863.8	536.6	371.5	200.0	24.0	.4	5307.6

TABLE LVII. MANEUVER n_z PEAKS FOR μ VERSUS n_z BY MISSION SEGMENT, ALTITUDE, AND C_T/σ

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1	3				4
0.8								
SUM			1	3				4
TIME	3.9	5.2	9.4	20.8	9.5	0.0	0.0	48.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1	3				4
0.8								
SUM			1	3				4
TIME	3.9	5.3	9.4	22.1	9.5	0.0	0.0	50.2

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				3	3			6
0.8								
0.7		1			2			3
0.6								
SUM		1		3	5			9
TIME	3.6	15.4	15.4	71.3	57.9	.3	0.0	163.9

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1	4				5
0.8								
SUM			1	4				5
TIME	.5	2.3	3.3	22.6	5.1	0.0	0.0	33.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2			1	7	3			11
0.8								
0.7		1			2			3
0.6								
SUM		1	1	7	5			14
TIME	4.1	17.6	18.8	93.8	63.1	.3	0.0	197.6

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5					1			1
1.4					1			1
1.3					3	1		4
1.2				12	11			23
0.8								
0.7				12	11			23
0.6				2	1			3
0.5			1					1
0.4								
SUM			1	26	28	1		56
TIME	3.4	6.6	12.1	91.1	84.0	3.1	0.0	200.3

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				5	2			7
0.8								
0.7				2				2
0.6				2	1			3
0.5								
SUM				9	3			12
TIME	4.9	4.6	18.0	36.9	23.4	0.0	0.0	87.7

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5					1			1
1.4					1			1
1.3					3	1		4
1.2				17	13			30
0.8								
0.7				14	11			25
0.6				4	2			6
0.5			1					1
0.4								
SUM			1	35	31	1		68
TIME	8.2	11.2	30.1	128.0	107.4	3.1	0.0	288.0

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 0, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1				1
0.8								
0.7				2				2
0.6								
SUM				3				3
TIME	.1	.7	7.0	28.8	10.4	0.0	0.0	47.0

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3								
1.2			2	1				3
0.8								
0.7			3	2	1			6
0.6				1				1
0.5				1				1
0.4								
SUM			5	6	1			12
TIME	1.4	2.5	13.4	20.8	14.7	.7	0.0	53.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3								
1.2			2	2				4
0.8								
0.7			3	4	1			8
0.6				1				1
0.5				1				1
0.4								
SUM			5	9	1			15
TIME	1.5	3.2	20.4	49.6	25.2	.7	0.0	100.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1	1			2
1.4					1			1
1.3					3	1		4
1.2			4	29	16			49
0.8								
0.7		1	3	18	14			36
0.6				5	2			7
0.5			1	1				2
0.4								
SUM		1	8	54	37	1		101
TIME	17.7	38.3	84.1	301.7	229.6	4.1	0.0	675.5

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE LESS, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2				2
0.8								
SUM				2				2
TIME	0.0	.2	1.0	1.4	0.0	0.0	0.0	2.6

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE LESS

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2				2
0.8								
SUM				2				2
TIME	0.0	.2	1.0	1.4	0.0	0.0	0.0	2.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4				1				1
1.3			2	1	1			4
1.2			1					1
0.8								
SUM			3	2	1			6
TIME	0.0	1.7	4.7	3.3	1.7	0.0	0.0	11.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
0.8								
0.7		1						1
0.6								
SUM		1						1
TIME	0.0	1.8	.2	0.0	0.0	0.0	0.0	2.0

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4				1				1
1.3			2	1	1			4
1.2			1					1
0.8								
0.7		1						1
0.6								
SUM		1	3	2	1			7
TIME	0.0	3.5	4.9	3.3	1.7	0.0	0.0	13.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4			1		1			2
1.3					2			2
1.2		1	2	6				9
0.8								
0.7								
0.6				1				1
0.5				1				1
0.4								
SUM		1	3	8	3			15
TIME	.5	.8	3.5	7.1	2.4	0.0	0.0	14.3

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2		2	1	3	2			8
0.8								
SUM		2	1	3	2			8
TIME	0.0	.1	2.3	4.3	2.7	0.0	0.0	9.5

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4			1		1			2
1.3					2			2
1.2		3	3	9	2			17
0.8								
0.7								
0.6				1				1
0.5				1				1
0.4								
SUM		3	4	11	5			23
TIME	.5	1.2	5.8	11.4	5.1	0.0	0.0	24.0

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 0, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2								
0.8								
0.7								
0.6				1				1
0.5								
SUM				2				2
TIME	0.0	0.0	.2	.9	0.0	0.0	0.0	1.2

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
0.8								
0.7				2				2
0.6								
SUM				2				2
TIME	0.0	0.0	.3	1.0	0.0	0.0	0.0	1.2

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2								
0.8								
0.7				2				2
0.6				1				1
0.5								
SUM				4				4
TIME	0.0	0.0	.5	1.9	0.0	0.0	0.0	2.4

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4			1	1	1			3
1.3			2	2	3			7
1.2		3	4	11	2			20
0.8								
0.7		1		2				3
0.6				2				2
0.5				1				1
0.4								
SUM		4	7	19	6			36
TIME	.5	4.8	12.2	18.0	6.8	0.0	0.0	42.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE LESS, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2			1	1				2
0.8								
SUM			1	2				3
TIME	1.9	8.4	10.2	17.1	12.5	.4	0.0	50.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE LESS

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2			1	1				2
0.8								
SUM			1	2				3
TIME	1.9	8.4	10.2	17.4	13.0	.6	0.0	51.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2			2	8	5			15
0.8								
0.7				4	1			5
0.6								
SUM			2	13	6			21
TIME	2.7	11.0	15.8	51.4	66.1	7.8	0.0	154.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
0.8								
0.7					1			1
0.6								
SUM					1			1
TIME	.4	.5	.6	10.2	11.6	.3	0.0	23.4

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2			2	8	5			15
0.8								
0.7				4	2			6
0.6								
SUM			2	13	7			22
TIME	3.1	11.5	16.4	61.6	77.7	8.0	0.0	178.2

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3			2	3	3			8
1.2			2	27	12			41
0.8								
0.7			1	2	4			7
0.6				2				2
0.5								
SUM			5	35	19			59
TIME	3.5	7.2	14.2	54.1	105.7	8.8	0.0	193.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				5	9			14
0.8								
0.7				1	2			3
0.6					1			1
0.5								
SUM				6	12			18
TIME	3.0	3.8	9.3	21.9	43.4	.1	0.0	81.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3			2	3	3			8
1.2			2	32	21			55
0.8								
0.7			1	3	6			10
0.6				2	1			3
0.5								
SUM			5	41	31			77
TIME	6.6	11.1	23.5	76.0	149.1	8.9	0.0	275.2

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2		1		3	3	1		8
0.8								
0.7					2			2
0.6					1			1
0.5								
SUM		1		4	6	1		12
TIME	.2	2.4	6.2	12.5	15.0	.4	0.0	36.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3					1			1
1.2			3	3	2			8
0.8								
0.7					3	1		4
0.6				2	1	1		4
0.5				1				1
0.4								
SUM			3	6	7	2		18
TIME	2.3	2.2	5.6	18.4	20.4	7.9	0.0	56.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1	1			2
1.2		1	3	6	5	1		16
0.8								
0.7					5	1		6
0.6				2	2	1		5
0.5				1				1
0.4								
SUM		1	3	10	13	3		30
TIME	2.4	4.6	11.8	30.9	35.4	8.4	0.0	93.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2		1	1	1				3
0.8								
SUM		1	1	2				4
TIME	0.0	.4	1.0	5.6	19.2	9.4	0.0	35.7

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4								
1.3				1				1
1.2		1	1	1				3
0.8								
SUM		1	1	2				4
TIME	0.0	.4	1.0	5.9	20.9	9.4	0.0	37.7

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3			2	7	4			13
1.2		2	9	48	31	1		91
0.8								
0.7			1	7	13	1		22
0.6				4	3	1		8
0.5				1				1
0.4								
SUM		2	12	68	51	3		136
TIME	14.0	35.9	62.9	192.8	300.3	35.5	0.0	641.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE LESS, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1				1
0.8								
SUM				1				1
TIME	18.8	8.6	6.5	64.6	39.3	0.0	0.0	137.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE LESS

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1				1
0.8								
SUM				1				1
TIME	18.8	8.8	6.5	65.0	53.0	.3	0.0	152.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2		1		2	1			4
0.8								
0.7				1	3			4
0.6								
SUM		1		3	4			8
TIME	16.7	16.9	10.7	76.6	221.3	9.4	0.0	351.7

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			1
1.3					1			1
1.2				5	4			9
0.8								
0.7				8	5			13
0.6				1	1			2
0.5								
SUM				14	12			26
TIME	0.0	.6	.7	57.5	158.7	7.7	0.0	225.1

TABLE LVII - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -6000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5								
1.4					1			1
1.3					1			1
1.2		1		7	5			13
0.8								
0.7				9	8			17
0.6				1	1			2
0.5								
SUM		1		17	16			34
TIME	16.7	17.5	11.4	134.1	380.0	17.1	0.0	576.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3								
1.2				8	9			17
0.8								
0.7				4	4			8
0.6				1				1
0.5				1				1
0.4								
SUM				15	13			28
TIME	11.5	4.5	2.3	120.9	423.4	10.5	0.0	572.9

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1	1			2
0.8								
0.7					1			1
0.6								
SUM				1	2			3
TIME	9.2	1.0	11.1	172.2	268.1	1.9	0.0	463.5

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE -3000

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4								
1.3								
1.2				9	10			19
0.8								
0.7				4	5			9
0.6				1				1
0.5				1				1
0.4								
SUM				16	15			31
TIME	20.7	5.5	13.3	293.1	691.5	12.3	0.0	1036.4

TABLE LVII - Continued

MANFUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 0, CT/S 0.04

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				1				1
0.8								
0.7				1				1
0.6								
SUM				2				2
TIME	1.2	1.7	1.7	93.7	44.3	0.0	0.0	142.6

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 0, CT/S 0.06

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				2	4			6
0.8								
0.7				1				1
0.6								
SUM				3	4			7
TIME	3.8	2.6	6.6	116.3	99.3	6.7	0.0	235.3

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 0

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3								
1.2				3	4			7
0.8								
0.7				2				2
0.6								
SUM				5	4			9
TIME	5.1	4.3	8.3	209.9	143.6	6.7	0.0	378.0

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				1				1
1.4					1			1
1.3					1			1
1.2		1		20	19			40
0.8								
0.7				15	13			28
0.6				2	1			3
0.5				1				1
0.4								
SUM		1		39	35			75
TIME	61.3	36.1	39.5	704.4	1327.7	39.4	0.0	2208.5

TABLE LVII - Concluded

MANEUVER NZ PEAKS FOR MU VS NZ

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6								
1.5				3	1			4
1.4			1	1	3			5
1.3			4	9	11	1		25
1.2		6	17	108	68	1		200
0.8								
0.7		2	4	42	40	1		89
0.6				13	6	1		20
0.5			1	4				5
0.4								
SUM		8	27	180	129	4		348
TIME	93.5	115.2	198.7	1216.9	1864.5	79.0	0.0	3567.7

TABLE LVIII. MANEUVER n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -6000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	.7	.4	1.4	.2	1.0	2.1	2.6	1.9	.4	.1	.3	0.0	0.0	0.0	0.0	11.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -6000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2													1			1
0.8																
SUM													1			1
TIME	.3	.3	.8	.1	1.3	4.2	1.5	.1	.7	.9	0.0	1.3	1.4	.6	0.0	13.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2					1								1			2
0.8																
SUM					1								1			2
TIME	1.9	4.6	3.2	.6	2.3	6.3	4.0	2.0	1.1	6.4	4.2	2.1	1.4	.6	0.0	40.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -3000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3														1		1
1.2							1	3	1	2						7
0.8																
0.7								2	1	3						6
0.6																
SUM							1	5	2	5				1		14
TIME	2.0	2.5	2.2	2.1	5.1	7.5	1.9	5.2	4.2	4.3	4.0	2.5	.2	.1	0.0	43.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -3000. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4			1													1
1.3									1							1
1.2	3		1		1		2									7
0.8																
0.7																
0.6					1											1
0.5								1								1
0.4																
SUM	3		2		2		2	1	1							11
TIME	.8	.1	.2	.3	.3	.1	.3	.8	.3	.2	.1	0.0	0.0	0.0	0.0	3.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -3000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3				1												1
1.2			1	1	1		1	2								6
0.8																
0.7		1				1				1						3
0.6																
SUM		1	1	2	1	1	1	2		1						10
TIME	3.7	5.5	3.4	2.1	5.3	5.6	4.1	5.1	3.9	7.2	4.0	6.2	1.9	.1	0.0	58.2

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4			1													1
1.3				1					1					1		3
1.2	3		2	1	2		4	5	1	2						20
0.9																
0.7		1				1		2	1	4						9
0.6					1											1
0.5								1								1
0.4																
SUM	3	1	3	2	3	1	4	8	3	6				1		35
TIME	21.7	6.3	5.0	5.4	14.8	22.3	19.5	35.8	46.8	52.9	25.8	23.9	17.4	6.2	0.0	306.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE 0. MISSION SEGMENT MANLVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
0.8																
0.7				1												1
0.6																
SUM				1												1
TIME	.4	.4	.4	.1	.4	.1	.1	1.3	.2	0.0	0.0	0.0	0.0	0.0	0.0	3.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE 0. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3											1					1
1.2									1						1	2
0.8																
0.7						1										1
0.6																
SUM						1			1		1				1	4
TIME	0.0	0.0	0.0	0.0	.7	1.2	1.6	1.2	1.8	1.1	.7	.1	0.0	.1	.0	8.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000. ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3											1					1
1.2									1						1	2
0.8																
0.7				1		1										2
0.6																
SUM				1		1			1		1				1	5
TIME	.4	.4	.7	.3	1.7	2.4	4.2	10.9	19.2	16.3	5.4	1.0	.7	.1	.0	63.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4			1													1
1.3				1					1		1			1		4
1.2	3		2	1	3		4	5	2	2			1		1	24
0.8																
0.7		1		1		2		2	1	4						11
0.6					1											1
0.5								1								1
0.4																
SUM	3	1	3	3	4	2	4	8	4	6	1		1	1	1	42
TIME	25.0	14.1	10.3	6.6	18.8	31.4	27.7	49.1	67.8	77.8	38.8	31.4	19.5	6.9	.0	425.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE LESS. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2						[illegible]										1
0.8																
SUM						1										1
TIME	2.2	2.5	.6	1.6	2.7	1.1	.7	2.8	2.1	1.3	0.0	0.0	0.0	0.0	0.0	17.5

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE LESS, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3							1									1
1.2																
SUM							1									1
TIME	2.9	3.9	1.5	.6	1.4	.8	2.6	1.8	5.8	1.2	.9	.5	.1	0.0	0.0	23.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE LESS, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.[illegible]								1								1
0.9																
SUM								1								1
TIME	9.9	.6	.1	1.0	2.1	2.7	7.5	25.1	8.5	11.3	6.3	2.1	0.0	0.0	0.0	[illegible]

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3							1									1
1.2						1		1								2
0.8																
SUM						1	1	1								3
TIME	15.0	7.0	2.2	3.2	6.2	4.6	10.8	29.7	16.4	13.8	7.2	2.6	.1	0.0	0.0	118.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2								2	1	2						[illegible]
.8																
0.7									1				1			2
0.6																
SUM								2	2	2			1			7
TIME	8.7	4.3	3.2	1.6	1.9	5.7	6.9	11.0	9.6	8.8	5.1	3.9	.3	.1	0.0	70.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000. MISSION SEGMENT MANEVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4							1									1
1.3			1	1												2
1.2		1														1
0.8																
SUM		1	1	1			1									4
TIME	0.0	.7	.4	.2	.0	.1	.1	.1	.1	.0	.2	.1	0.0	0.0	0.0	2.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1									1	1				[illegible]
0.8																
.7									1	1						[illegible]
0.6																
SUM		1							1	1	1	1				[illegible]
TIME	8.5	10.9	3.0	1.5	2.0	1.5	1.3	2.6	8.3	8.2	11.3	4.7	7.0	.3	0.0	72.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2	1							3		1						5
0.8																
0.7								2		1	1					4
0.6																
SUM	1							5		2	1					9
TIME	14.7	4.0	3.9	.4	0.0	.1	2.3	24.4	42.8	26.0	37.6	22.8	17.3	.9	0.0	[illegible]

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4							1									1
1.3			1	1												2
1.2	1	2						5	1	3	1	1				14
0.8																
0.7								2	2	2	1		1			8
0.6																
SUM	1	2	1	1			1	7	3	5	2	1	1			25
TIME	31.9	18.[illegible]	10.6	3.6	3.9	7.4	10.6	38.1	60.8	43.1	54.5	31.6	25.4	1.3	0.0	341.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5									1							1
1.4									1							1
1.3									1			2				3
1.2		2	2		3		5	3	3	1	2	1	2			24
0.8																
0.7			6	1	8	4	8	11	9	1	3	1				51
0.6					3	2	1	2	1			1				10
0.5		1														1
0.4																
SUM		3	8	1	14	6	14	16	15	2	5	5	2			91
TIME	15.1	9.0	11.3	7.2	13.6	23.9	37.5	32.0	36.9	22.0	21.7	11.5	7.3	.6	.2	245.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1		3				2				1				7
0.8																
SUM		1		3				2				1				7
TIME	1.5	1.4	1.4	1.0	.8	.5	.8	1.5	.8	.1	.1	.3	0.0	0.0	0.0	10.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5									1							1
1.4		1														1
1.3		1	1	1	1	1			1	1						7
1.2		2	4		6	6	3	6	2	1	1	2				33
0.8																
0.7			1			1	2	3		1	1					9
0.6						1	2	2								5
0.5																
SUM		4	6	1	7	9	7	11	4	3	2	2				56
TIME	14.5	17.4	12.4	8.5	8.4	13.0	11.4	18.1	21.5	20.5	26.7	29.9	17.6	4.9	0.0	225.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5						1										1
1.4																
1.3					1											1
1.2	2				2	4		2	2	4	2	1				19
0.8																
0.7	1					1	3		1	5	2	1				14
0.6							1									1
0.5						1										1
0.4																
SUM	3				3	7	4	2	3	9	4	2				37
TIME	40.1	8.9	8.5	2.2	8.4	26.3	28.1	67.3	177.4	145.1	87.6	40.3	20.6	1.5	0.0	662.5

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5						1			2							3
1.4		1							1							2
1.3		1	1	1	2	1			2	1		2				11
1.2	2	5	6	3	11	10	8	13	7	6	5	5	2			83
0.8																
0.7	1		7	1	8	6	13	14	9	7	6	2				74
0.6					3	3	4	4	1			1				16
0.5		1				1										2
0.4																
SUM	3	8	14	5	24	22	25	31	22	14	11	10	2			191
TIME	71.2	37.6	33.6	18.9	31.4	63.7	72.8	118.9	236.6	187.8	136.2	82.0	45.4	7.0	.2	1143.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5					1											1
1.4																
1.3																
1.2		2	1					2						1		6
0.8																
0.7				1	1	1										3
0.6					1											1
0.5					1											1
0.4																
SUM		2	1	1	4	1		2						1		12
TIME	6.2	5.3	9.1	8.1	9.0	11.1	12.6	6.8	14.6	5.8	2.8	3.2	2.0	.1	0.0	96.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3					1											1
1.2	1							2								3
0.8																
0.7				1			3	1								5
0.6						1										1
0.5																
SUM	1			1	1	1	3	3								10
TIME	.1	0.0	.3	.6	.8	.5	1.1	.9	.5	.2	0.0	0.0	0.0	0.0	0.0	5.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3								1								1
1.2		1	5		4	2		1			2	1				16
0.8																
0.7						2				1	3	1		1		8
0.6					1	1		1		1			1			5
0.5							1									1
0.4																
SUM		1	5		5	5	1	3		2	5	2	1	1		31
TIME	4.2	5.5	5.0	4.2	4.0	7.5	9.6	6.6	11.6	14.3	7.9	4.7	11.4	1.2	.1	97.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000. ALTITUDE 0. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2									1			1				2
0.8																
0.7							1									1
0.6																
SUM							1		1			1				3
TIME	15.1	1.8	1.8	4.6	6.5	20.0	44.3	51.2	50.2	29.0	20.2	16.7	6.6	.6	0.0	268.6

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5					1											1
1.4																
1.3					1			1								2
1.2		[illegible]	[illegible]		4	2		8	1		2	2		1		27
0.8																
0.7				2	1	3	4	1		1	3	1		1		17
0.6					2	2		1		1			1			7
0.5					1		1									2
0.4																
SUM	[illegible]	[illegible]	[illegible]	2	10	7	5	8	1	2	5	3	1	2		56
TIME	26.6	12.5	16.2	17.5	20.3	39.0	67.8	65.5	76.9	49.3	30.9	24.6	20.0	2.0	.1	468.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 3000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2										1	1					2
0.8																
0.7								1		1						2
0.6																
SUM								1		2	1					4
TIME	[illegible]	2.1	2.5	1.1	1.3	1.8	1.1	1.6	1.5	4.2	1.7	.1	0.0	0.0	0.0	19.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 3000, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2		1	1					1		1						4
0.8																
SUM		1	1					1	1	1						5
TIME	[illegible]	.6	.5	.1	.1	.7	1.0	2.8	3.9	2.1	.7	10.8	12.0	0.0	0.0	35.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3									1							1
1.2		1	1					1		2	1					6
0.8																
0.7								1		1						2
0.6																
SUM		1	1					2	1	3	1					9
TIME	[illegible]	2.7	3.3	1.2	1.5	2.5	3.3	5.6	19.5	24.7	12.3	31.2	16.0	0.0	0.0	123.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5					1	1			2							4
1.4		1					1		1							3
1.3		1	2	2	3	1	1	1	3	1		2				17
1.2	4	11	13	3	15	13	8	25	9	11	9	8	2	1		132
0.8																
0.7	1		7	3	9	9	17	18	11	11	10	3	1	1		101
0.6					5	5	4	5	1	1		1	1			23
0.5		1			1	1	1									4
0.4																
SUM	5	14	22	8	34	30	32	49	27	24	19	14	4	2		294
TIME	143.6	78.7	66.1	44.9	63.5	117.9	165.8	259.3	411.8	318.9	244.4	174.0	107.6	10.2	.3	2297.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2			1				1									2
0.8																
SUM			1				1									2
TIME	2.5	1.5	1.4	.2	.3	1.3	.8	2.2	1.8	1.0	0.0	0.0	0.0	0.0	0.0	13.0

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE LESS. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	0.0	.8	.3	.0	.3	.3	.3	.1	0.0	[illegible]	0.0	[illegible]	.0	0.0	[illegible]	2.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2			1		1		1									3
0.8																
SUM			1		1		1									3
TIME	17.4	9.0	4.8	1.7	2.6	3.8	6.0	7.6	15.5	3.4	1.6	.3	0.0	0.0	0.0	73.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE -6000. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4						1				1						2
1.3									1							1
1.2			1			1	3	1								6
0.8																
0.7		1				1										2
0.6										1						1
0.5																
SUM		1	1			3	3	1	1	2						12
TIME	6.4	4.0	4.6	3.1	5.0	8.4	13.7	14.9	23.8	11.9	10.1	2.2	.2	.1	.1	108.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE -6000. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3				1							1					2
1.2																
0.8																
0.7	1															1
0.6																
SUM	1			1							1					3
TIME	1.7	3.2	1.9	1.2	.8	.7	.4	.2	.9	.2	.1	0.0	0.0	0.0	0.0	11.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE -6000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3								1								1
1.2			1		2	3	1	1	3							11
0.8																
0.7					1		1	1	1							4
0.6																
SUM			1		3	3	2	3	4							16
TIME	3.7	6.3	[illegible]	1.1	2.5	3.6	9.9	15.7	20.1	15.4	8.0	7.8	1.5	.3	0.0	99.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE -6000. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4									1							1
1.3									1							1
1.2						2	3	2	1	3	2	1				14
0.8																
0.7						1	2	5	5	2						15
0.6								1		1						2
0.5																
SUM						3	5	8	8	6	2	1				33
TIME	18.6	1.2	2.3	2.6	5.6	13.9	25.5	44.0	52.6	107.1	93.4	56.3	23.4	4.6	0.0	451.2

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4						1			1	1						3
1.3				1				1	2		1					5
1.2			2		2	6	7	4	4	3	2	1				31
0.8																
0.7	1	1			1	2	3	6	6	2						22
0.6								1		2						3
0.5																
SUM	1	1	2	1	3	9	10	12	13	8	3	1				64
TIME	30.4	14.7	12.0	8.0	13.9	26.6	49.6	74.8	97.4	134.6	111.6	66.3	25.1	5.0	.1	670.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2					1	2	1	1	2							7
0.8																
0.7				1	3											4
0.6			1								1					2
0.5																
SUM			1	1	4	2	1	1	2		1					13
TIME	7.1	8.4	7.3	6.5	12.9	9.7	6.6	9.9	12.4	8.3	3.0	3.0	.1	0.0	0.0	95.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4									1							1
1.3											1					1
1.2		1				1	1		1	2						6
0.8																
SUM		1				1	1		2	2	1					8
TIME	.1	.8	1.9	1.6	.4	1.5	1.0	1.2	2.1	1.6	.8	.1	0.0	0.0	0.0	13.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3											1					1
1.2			1		1	2	4	3	6	4	5	1				27
0.8																
0.7										1	2					3
0.6											1					1
0.5																
SUM			1		1	2	4	3	6	5	9	1				32
TIME	4.6	4.3	2.5	2.2	3.3	4.2	6.2	11.5	12.3	14.0	12.2	4.4	.5	.1	0.0	82.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000, MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2							1	1	2	2						6
0.8																
0.7							1		1	5	1					8
0.6																
SUM							2	1	3	7	1					14
TIME	33.7	1.0	2.0	4.3	8.8	24.2	53.7	85.2	139.1	153.4	64.2	23.7	22.0	0.0	0.0	615.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.5																
1.4									1							1
1.3											2					2
1.2		1	1		2	5	7	5	11	8	5	1				46
0.8																
0.7				1	3		1		1	6	3					15
0.6			1								2					3
0.5																
SUM		1	2	1	5	5	8	5	13	14	12	1				67
TIME	45.5	14.5	13.7	14.6	25.4	39.7	67.5	107.7	165.9	177.3	80.2	31.3	22.6	.1	0.0	805.9

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1			1		1	1	1		1		1			7
0.8																
0.7			2	1				1				1				5
0.6																
SUM		1	2	1	1		1	2	1		1	1	1			12
TIME	1.3	4.6	6.9	5.3	3.9	4.2	3.1	3.8	4.2	1.0	.8	.1	.2	.2	0.0	39.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5							1									1
1.4																
1.3					1			1				2				4
1.2			1		1		1		1							4
0.8																
0.7				1		1						1				3
0.6					1											1
0.5																
SUM			1	1	3	1	2	1	1			3				13
TIME	1.1	1.3	.8	1.2	1.5	.7	.7	.7	.1	.3	.7	.8	.2	0.0	0.0	10.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.4																
1.3										1						1
1.2		1				2					1					4
0.8																
0.7										1	2					3
0.6											1					1
0.5																
SUM		1				2				2	4					9
TIME	3.2	5.9	3.3	1.9	3.4	3.6	6.5	7.2	9.6	5.6	1.6	.4	.1	0.0	0.0	52.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0. MISSION SEGMENT STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2					1			1	2		2					6
0.8																
0.7					1			1								2
0.6																
SUM					2			2	2		2					8
TIME	6.9	1.0	3.8	8.1	16.5	42.9	70.8	42.7	62.6	30.7	7.0	.8	0.0	0.0	0.0	293.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000. ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5							1									1
1.4																
1.3					1			1		1		2				5
1.2		2	1		3	2	2	2	4		4		1			21
0.8																
0.7			2	2	1	1		2		1	2	2				13
0.6					1						1					2
0.5																
SUM		2	3	2	6	3	3	5	4	2	7	4	1			42
TIME	12.5	12.8	14.7	16.4	25.4	51.4	81.1	54.4	76.5	37.6	10.2	2.1	.5	.2	0.0	395.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5							1									1
1.4						1			2	1						4
1.3				1	1			2	2	1	3	2				12
1.2		3	5		8	13	17	11	19	11	11	2	1			101
0.8																
0.7	1	1	2	3	5	3	4	8	7	9	5	2				50
0.6			1		1			1		2	3					8
0.5																
SUM	1	4	8	4	15	17	22	22	30	24	22	6	1			176
TIME	105.7	51.0	45.2	40.6	67.2	121.6	205.0	250.9	370.4	370.8	211.5	100.9	48.2	5.3	.1	1994.6

TABLE LVIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS. MISSION SEGMENT ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2						1										1
0.8																
SUM						1										1
TIME	3.1	2.0	2.3	2.1	2.1	5.3	2.1	1.5	2.1	1.7	1.6	0.0	0.0	0.0	0.0	25.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS. MISSION SEGMENT MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2						1										1
0.8																
SUM						1										1
TIME	0.0	0.0	0.0	.0	.1	.1	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1						1								2
0.8																
SUM		1						1								2
TIME	.6	1.6	.7	.3	.4	.9	.8	1.2	[illegible]	.1	.2	.3	.6	.3	0.0	7.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1				2		1								4
0.8																
SUM		1				2		1								4
TIME	9.2	3.6	4.2	2.2	3.1	9.4	8.0	4.1	2.8	2.8	8.5	23.2	7.0	.6	0.0	88.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE -6000. MISSION SEGMENT DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
0.8																
0.7												1				1
0.6																
SUM												1				1
TIME	1.0	.4	.1	.2	.5	2.9	2.3	6.4	3.9	2.8	.6	1.9	1.8	.3	0.0	25.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000. ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
0.8																
0.7												1				1
0.6																
SUM												1				1
TIME	7.7	3.0	2.8	3.1	7.3	14.7	21.6	28.5	12.1	13.5	15.9	40.2	17.6	.9	0.0	198.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.3																
1.2		1				2										4
0.8																
0.7												1				1
0.6																
SUM		1				2		1				1				5
TIME	27.9	17.4	16.3	16.4	28.0	66.0	116.3	100.6	62.4	96.3	41.8	65.2	24.7	1.5	0.0	680.7

TABLE LVIII - Concluded

MANEUVER NZ PEAKS FOR VELOCITY VS NZ

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
1.6																
1.5					1	1	1		2							5
1.4		1	1			1	1		3	1						8
1.3		1	2	4	4	1	1	3	6	2	4	4		1		33
1.2	7	15	20	4	26	28	29	42	30	24	20	10	4	1	1	261
0.8																
0.7	2	2	9	7	14	14	21	28	19	24	15	6	1	1		163
0.6			1		7	5	4	6	1	3	3	1	1			32
0.5		1			1	1	1	1								5
0.4																
SUM	9	20	33	15	53	51	58	80	61	54	42	21	6	3	1	507
TIME	302.3	161.2	137.9	108.5	177.5	336.9	514.8	659.9	912.3	863.8	536.6	371.5	200.0	24.0	.4	5307.6

TABLE LIX. n_x PEAKS FOR AIRSPEED VERSUS n_x BY WEIGHT

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35	1															1
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	2															2
0.15	2															2
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	5															5
TIME	25.0	14.1	10.3	6.6	18.8	31.4	27.7	49.1	67.8	77.8	38.8	31.4	19.5	6.9	.0	425.3

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 7000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	6	1														7
0.15	2															2
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	8	1														9
TIME	143.6	78.7	66.1	44.9	63.5	117.9	165.8	259.3	411.8	318.9	244.4	174.0	107.6	10.2	.3	2207.0

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 8000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	1															1
0.15	1															1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	2															2
TIME	105.7	51.0	45.2	40.6	67.2	121.6	205.0	250.9	370.4	370.8	211.5	100.9	48.2	5.3	.1	1994.6

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 9000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	2															2
0.15	1															1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	3															3
TIME	27.9	17.4	16.3	16.4	28.0	66.0	116.3	100.6	62.4	96.3	41.8	65.2	24.7	1.5	0.0	680.7

TABLE LX. nx PEAKS FOR AIRSPEED VERSUS nx BY ALTITUDE

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE LESS

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10																
0.15	1															1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	1															1
TIME	42.7	20.4	11.5	7.4	11.8	18.2	24.8	41.6	34.8	21.8	20.7	30.6	7.1	.6	0.0	293.8

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35	1															1
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	10															10
0.15	2															2
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	13															13
TIME	148.8	70.8	61.8	49.4	83.6	145.7	196.8	302.4	485.7	487.3	257.8	139.0	85.5	13.2	.2	2528.0

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	1	1														2
0.15	3															3
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	4	1														5
TIME	39.1	26.1	32.5	34.7	52.8	114.6	202.7	158.8	163.9	113.9	48.3	27.8	21.3	2.2	.2	1050.8

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE SUM

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35	1															1
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	11	1														12
0.15	6															6
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	18	1														19
TIME	302.3	161.2	137.9	108.5	177.5	336.9	514.8	659.9	912.3	863.8	536.6	371.5	200.0	24.0	.4	5307.6

TABLE LXI. n_x PEAKS FOR LONGITUDINAL CYCLIC BOOST TUBE LOAD DEFLECTION VERSUS n_x BY MISSION SEGMENT

NX PEAKS FOR CY-LNG DFLECTN VS NX BY MISS. SEG. ASCENT

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100									3	1						4
100																
150									1							1
200																
250																
300																
350																
400																
450																
SUM									4	1						5

NX PEAKS FOR CY-LNG DFLECTN VS NX BY MISS. SEG. MANUVR

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100										2						2
100									1							1
150																
200																
250																
300																
350																
400																
450																
SUM									1	2						3

NX PEAKS FOR CY-LNG DFLECTN VS NX BY MISS. SEG. DESCNT

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100									3							3
100			1													1
150																
200																
250																
300																
350																
400																
450																
SUM			1						3							4

TABLE LXI - Concluded

NX PEAKS FOR CY-LNG DFLECTN VS NX BY MISS. SEG. STEADY

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100									3	1						4
100																
150																
200																
250																
300																
350																
400																
450																
SUM									3	1						4

NX PEAKS FOR CY-LNG DFLECTN VS NX BY MISS. SEG. SUM

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100									9	4						13
100			1						1							2
150									1							1
200																
250																
300																
350																
400																
450																
SUM			1						11	4						16

TABLE LXII. ny PEAKS FOR AIRSPEED VERSUS ny BY WEIGHT

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10	1									1						2
0.15																
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	1									1						2
TIME	25.0	14.1	10.3	6.6	18.8	31.4	27.7	49.1	67.8	77.8	38.8	31.4	19.5	6.9	.0	425.3

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 7000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15					1				2		1					4
-0.10																
0.10	4	3	7	1	3	2	1	2	2		1					26
0.15																
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	4	3	7	1	4	2	1	2	4		2					30
TIME	143.6	78.7	66.1	44.9	63.5	117.9	165.8	259.3	411.8	318.9	244.4	174.0	107.6	10.2	.3	2207.0

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 8000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15					1			2			1					4
-0.10																
0.10	2	3					2	3	1	3			1			15
0.15							1									1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	2	3			1		3	5	1	3	1		1			20
TIME	105.7	51.0	45.2	40.6	67.2	121.6	205.0	250.9	370.4	370.8	211.5	100.9	48.2	5.3	.1	1994.6

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 9000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10					1											1
0.15																
0.20																
0.25																
0.30																
0.35																
0.40																
SUM					1											1
TIME	27.9	17.4	16.3	16.4	28.0	66.0	116.3	100.6	62.4	96.3	41.8	65.2	24.7	1.5	0.0	680.7

TABLE LXIII. ny PEAKS FOR AIRSPEED VERSUS ny BY ALTITUDE

NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE -6000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15								1								1
-0.10																
0.10	1						2	3		2						8
0.15							1									1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	1						3	4		2						10
TIME	71.8	41.1	28.6	15.3	27.4	55.0	85.8	143.4	171.4	197.6	186.2	140.1	69.4	7.9	.1	1241.1

NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE -3000

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15									2		1					3
-0.10																
0.10	6	5	7	1	3	2	1	1	3	2			1			32
0.15																
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	6	5	7	1	3	2	1	1	5	2	1		1			35
TIME	148.8	70.8	61.8	49.4	83.6	145.7	196.8	302.4	485.7	487.3	257.8	139.0	85.5	13.2	.2	2528.0

NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 0

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15					2			1			1					4
-0.10																
0.10		1			1			1			1					4
0.15																
0.20																
0.25																
0.30																
0.35																
0.40																
SUM		1			3			2			2					8
TIME	39.1	76.1	32.5	34.7	52.8	114.6	202.7	158.8	183.9	113.9	48.3	27.8	21.3	2.2	.2	1058.8

NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE SUM

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15					2			2	2		2					8
-0.10																
0.10	7	6	7	1	4	2	3	5	3	4	1		1			44
0.15							1									1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM	7	6	7	1	6	2	4	7	5	4	3		1			53
TIME	302.3	161.2	137.9	108.5	177.5	336.9	514.8	659.9	912.3	863.8	536.6	371.5	200.0	24.0	.4	5307.6

TABLE LXIV. n_y PEAKS FOR LATERAL CYCLIC BOOST TUBE LOAD DEFLECTION VERSUS n_y BY MISSION SEGMENT

NY PEAKS FOR CY-LAT DFLECTN VS NY BY MISS. SEG. ASCENT

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100							1		14							15
100									4							4
150									1							1
200									1							1
250																
300																
350																
400																
450																
SUM							1		20							21

NY PEAKS FOR CY-LAT DFLECTN VS NY BY MISS. SEG. MANUVR

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100							1									1
100																
150																
200																
250																
300																
350																
400																
450																
SUM							1									1

NY PEAKS FOR CY-LAT DFLECTN VS NY BY MISS. SEG. DESCNT

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100							1		4							5
100									1							1
150																
200																
250																
300																
350																
400																
450																
SUM							1		5							6

TABLE LXIV - Concluded

NY PEAKS FOR CY-LAT DFLECTN VS NY BY MISS. SEG. STEADY

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100									6							6
100																
150																
200																
250																
300																
350																
400																
450																
SUM									6							6

NY PEAKS FOR CY-LAT DFLECTN VS NY BY MISS. SEG. SUM

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-450																
-400																
-350																
-300																
-250																
-200																
-150																
-100							3		24							27
100									5							5
150									1							1
200									1							1
250																
300																
350																
400																
450																
SUM							3		31							34

TABLE LXV. n_x PEAKS FOR n_x VERSUS n_z

NX PEAKS FOR NX VS NZ

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5																
1.4																
1.3																
1.2																
0.8			1						12	6						19
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM			1						12	6						19

TABLE LXVI. n_x PEAKS FOR n_y VERSUS n_x

NX PEAKS FOR NY VS NX

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-0.40																
-0.35								1								1
-0.30																
-0.25																
-0.20																
-0.15																
-0.10																
0.10								12								12
0.15								6								6
0.20																
0.25																
0.30																
0.35																
0.40																
SUM								19								19

TABLE LXVII. n_y PEAKS FOR n_x VERSUS n_y

NY PEAKS FOR NX VS NY

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
LESS																
-0.40																
-0.35																
-0.30																
-0.25																
-0.20																
-0.15								8								8
-0.10																
0.10								32	11	1						44
0.15								1								1
0.20																
0.25																
0.30																
0.35																
0.40																
SUM								41	11	1						53

TABLE LXVIII. n_y PEAKS FOR n_y VERSUS n_z

NY PEAKS FOR NY VS NZ

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5																
1.4							1									1
1.3																
1.2									2							2
0.8							7		39	1						47
0.7									2							2
0.6									1							1
0.5																
0.4																
0.2																
LESS																
SUM							8		44	1						53

TABLE LXIX. n_z PEAKS FOR n_x VERSUS n_z

NZ MANEUVER PEAKS FOR NX VS NZ

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5								5								5
1.4								7	1							8
1.3								33								33
1.2								259	2							261
0.8																
0.7								161	2							163
0.6								32								32
0.5								4	1							5
0.4																
0.2																
LESS																
SUM								501	6							507

TABLE LXX. n_z PEAKS FOR n_y VERSUS n_z

NZ MANEUVER PEAKS FOR NY VS NZ

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5								5								5
1.4								8								8
1.3								33								33
1.2							1	259	1							261
0.8																
0.7								160	3							163
0.6								32								32
0.5								5								5
0.4																
0.2																
LESS																
SUM							1	502	4							507

TABLE LXXI. n_{z_e} PEAKS FOR μ VERSUS n_{z_e} BY ALTITUDE AND MISSION SEGMENT

NZE PEAKS FOR MU VS NZE BY ALT LESS MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7				1				1
1.6			1					1
1.5				2				2
1.4				1				1
1.3								
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			1	4				5
TIME	3.9	5.3	9.4	22.1	9.5	0.0	0.0	50.2

NZE PEAKS FOR MU VS NZE BY ALT -6000 MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6			1	4				5
1.5				2				2
1.4								
1.3				2	3			5
1.2				1	1			2
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			1	9	4			14
TIME	4.1	17.6	18.8	93.8	63.1	.3	0.0	197.6

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT -3000 MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7					2			2
1.6				1	1			2
1.5				5	3			8
1.4			1	9	8			18
1.3				11	7	1		19
1.2				4	3			7
0.8								
0.7				6	7			13
0.6			1					1
0.5								
0.4								
0.2								
LESS								
SUM			2	36	31	1		70
TIME	8.2	11.2	30.1	128.0	107.4	3.1	0.0	288.0

NZE PEAKS FOR MU VS NZE BY ALT 0 MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8				1				1
1.7								
1.6				1				1
1.5			3					3
1.4			1	3				4
1.3								
1.2					1			1
0.8								
0.7				2				2
0.6				1				1
0.5								
0.4								
0.2								
LESS								
SUM			4	8	1			13
TIME	1.5	3.2	20.4	49.6	25.2	.7	0.0	100.6

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT 3000 MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6								
1.5								
1.4								
1.3								
1.2				1				1
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM				1				1
TIME	0.0	.9	4.5	7.0	21.9	0.0	0.0	34.3

NZE PEAKS FOR MU VS NZE BY ALT 6000 MIS-SEG ASCENT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6								
1.5								
1.4								
1.3			1					1
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			1					1
TIME	0.0	0.0	.9	1.2	2.7	0.0	0.0	4.7

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT LESS MIS-SEG MANUVR

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6				1				1
1.5			1	1				2
1.4								
1.3								
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			1	2				3
TIME	0.0	.2	1.0	1.4	0.0	0.0	0.0	2.6

NZE PEAKS FOR MU VS NZE BY ALT -6000 MIS-SEG MANUVR

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6			1	1	1			3
1.5		1	1					2
1.4				1				1
1.3			1					1
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM		1	3	2	1			7
TIME	0.0	3.5	4.9	3.3	1.7	0.0	0.0	13.4

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT -3000 MIS-SEG MANUVR

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7					1			1
1.6			1		1			2
1.5			1	5				6
1.4			2	2	3			7
1.3				2	1			3
1.2		4	2	4				10
0.8								
0.7								
0.6				1				1
0.5				1				1
0.4								
0.2								
LESS								
SUM		4	6	15	6			31
TIME	.5	1.2	5.8	11.4	5.1	0.0	0.0	24.0

NZE PEAKS FOR MU VS NZE BY ALT 0 MIS-SEG MANUVR

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6								
1.5								
1.4				1				1
1.3								
1.2								
0.8								
0.7								
0.6				1				1
0.5								
0.4								
0.2								
LESS								
SUM				2				2
TIME	0.0	0.0	.5	1.9	0.0	0.0	0.0	2.4

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT LESS MIS-SEG DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6			2	2				4
1.5				1				1
1.4				2				2
1.3								
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			2	5				7
TIME	1.9	8.4	10.2	17.4	13.0	.6	0.0	51.6

NZE PEAKS FOR MU VS NZE BY ALT -6000 MIS-SEG DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6			1	4				5
1.5				6	2			8
1.4				6	2			8
1.3			1	1				2
1.2					1			1
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			2	17	5			24
TIME	3.1	11.5	16.4	61.6	77.7	8.0	0.0	178.2

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT -3000 MIS-SEG DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8				1				1
1.7					1			1
1.6				4	1			5
1.5			1	8	16			25
1.4			2	8	6			16
1.3			1	20	4			25
1.2			2	3				5
0.8								
0.7			1	2	1			4
0.6								
0.5								
0.4								
0.2								
LESS								
SUM			7	46	29			82
TIME	6.6	11.1	23.5	76.0	149.1	8.9	0.0	275.2

NZE PEAKS FOR MU VS NZE BY ALT 0 MIS-SEG DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6					1			1
1.5			1	2	2			5
1.4			2	2				4
1.3		1		4	4			9
1.2				1		1		2
0.8								
0.7				2	2	2		6
0.6				1				1
0.5								
0.4								
0.2								
LESS								
SUM		1	3	12	9	3		28
TIME	2.4	4.6	11.8	30.9	35.4	8.4	0.0	93.4

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT 3000 MIS-SEG DESCNT

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6								
1.5				1				1
1.4			1					1
1.3		1		1				2
1,2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM		1	1	2				4
TIME	0.0	.4	1.0	5.9	20.9	9.4	0.0	37.7

NZE PEAKS FOR MU VS NZE BY ALT LESS MIS-SEG STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6								
1.5								
1.4				1				1
1.3								
1.2								
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM				1				1
TIME	18.8	8.8	6.5	65.0	53.0	.3	0.0	152.4

TABLE LXXI - Continued

NZE PEAKS FOR MU VS NZE BY ALT -6000 MIS-SEG STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8					1			1
1.7					3			3
1.6				6	3			9
1.5		1		6	7			14
1.4								
1.3								
1.2			1					1
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM		1	1	12	14			28
TIME	16.7	17.5	11.4	134.1	380.0	17.1	0.0	576.8

NZE PEAKS FOR MU VS NZE BY ALT -3000 MIS-SEG STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7				1				1
1.6			1	2				3
1.5				1	5			6
1.4				11	8			19
1.3				2	1			3
1.2				4	3			7
0.8								
0.7				1				1
0.6				1				1
0.5								
0.4								
0.2								
LESS								
SUM			1	23	17			41
TIME	20.7	5.5	13.3	293.1	691.5	12.3	0.0	1036.4

TABLE LXXI - Concluded

NZE PEAKS FOR MU VS NZE BY ALT 0 MIS-SEG STEADY

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8								
1.7								
1.6				2	3			5
1.5					3			3
1.4								
1.3				1	1			2
1.2				1				1
0.8								
0.7								
0.6								
0.5								
0.4								
0.2								
LESS								
SUM				4	7			11
TIME	5.1	4.3	8.3	209.9	143.6	6.7	0.0	378.0

NZE PEAKS FOR MU VS NZE SUM

	LESS	0.05	0.10	0.15	0.20	0.25	0.30	SUM
2.4								
2.2								
2.0								
1.8				2	1			3
1.7				2	7			9
1.6			8	28	11			47
1.5		2	8	40	38			88
1.4			9	47	27			83
1.3		2	4	44	21	1		72
1.2		4	5	19	9	1		38
0.8								
0.7			1	13	10	2		26
0.6			1	5				6
0.5				1				1
0.4								
0.2								
LESS								
SUM		8	36	201	124	4		373
TIME	93.5	115.2	198.7	1216.9	1864.5	79.0	0.0	3567.7

TABLE LXXII. n_{ze} PEAKS FOR AIRSPEED VERSUS n_{ze} BY ALTITUDE AND MISSION SEGMENT

NZE PEAKS FOR VEL VS NZE BY ALT LESS MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7						1										1
1.6			1													1
1.5							1	1								2
1.4						1										1
1.3																
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM			1			2	1	1								5
TIME	7.8	6.0	4.4	3.9	5.1	7.7	3.6	6.5	6.1	4.1	1.6	0.0	0.0	0.0	0.0	56.5

NZE PEAKS FOR VEL VS NZE BY ALT LESS MIS-SEG MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6						1										1
1.5			1		1											2
1.4																
1.3																
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM			1		1	1										3
TIME	0.0	.8	.3	.1	.4	.4	.5	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6

NZE PEAKS FOR VEL VS NZE BY ALT LESS MIS-SEG DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6		2					1	1								4
1.5						1										1
1.4							1	1								2
1.3																
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM		2				1	2	2								7
TIME	6.9	10.3	3.3	1.9	2.1	3.0	4.7	4.0	8.9	3.8	2.3	1.2	.7	.3	0.0	53.6

TABLE LXXII - Continued

NZE PEAKS FOR VEL VS NZE BY ALT LESS MIS-SEG STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5																
1.4								1								1
1.3																
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM								1								1
TIME	28.0	3.3	3.5	1.4	4.2	7.2	16.0	31.0	19.8	13.9	16.8	29.4	6.3	.3	0.0	181.1

NZE PEAKS FOR VEL VS NZE BY ALT -6000 MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7						1				1						2
1.6			1			1	3		1							6
1.5						1	1	1								3
1.4										1						1
1.3								2	1	2						5
1.2					1						1					2
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM			1		1	3	4	3	2	4	1					19
TIME	18.8	11.0	11.4	7.5	14.2	26.6	36.8	33.6	34.8	22.0	15.9	6.1	.5	.2	.1	239.5

NZE PEAKS FOR VEL VS NZE BY ALT -6000 MIS-SEG MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6				1			1				1					3
1.5		1	1													2
1.4				1												1
1.3		1														1
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM		2	1	2			1				1					7
TIME	1.7	3.9	2.4	1.3	.9	.8	.5	.3	.9	.3	.4	.1	0.0	0.0	0.0	13.4

TABLE LXXII - Continued

NZE PEAKS FOR VEL VS NZE BY ALT -6000 MIS-SEG DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6			1		1	2		1								5
1.5					1	1	1	2	3							8
1.4					1		4		1		1	1				8
1.3		1				1										2
1.2													1			1
0.8																
0.7										1						1
0.6																
0.5																
0.4																
0.2																
LESS																
SUM		1	1		3	4	5	3	4	1	1	1	1			25
TIME	13.5	17.9	7.1	2.9	6.4	12.3	15.0	24.8	33.0	27.3	19.9	15.7	12.4	1.6	0.0	209.8

NZE PEAKS FOR VEL VS NZE BY ALT -6000 MIS-SEG STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8									1							1
1.7									2	1						3
1.6						2	3	1		2	1					9
1.5	1					1	1	5	3	4						15
1.4								4	1	2	2	1				10
1.3											1					1
1.2		1														1
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM	1	1				3	4	10	7	9	4	1				40
TIME	37.0	8.3	7.7	3.6	6.0	15.2	33.6	84.7	102.6	148.0	150.1	118.1	56.6	6.2	0.0	778.4

NZE PEAKS FOR VEL VS NZE BY ALT -3000 MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7									2							2
1.6							1		1							2
1.5					1	2		2	3	1						9
1.4		1	1		1	1	7	3	4	1	1	3	1			24
1.3		1	3		2	1	2	7	4	1	1		1	1		24
1.2		1				1	2	2		1	1	1				9
0.8																
0.7			1		2	2	4	4	2	3	1	2				21
0.6		1														1
0.5																
0.4																
0.2																
LESS																
SUM		4	5		6	7	16	18	16	7	4	6	2	1		92
TIME	28.5	25.4	24.1	14.1	33.6	50.8	53.1	62.3	54.0	54.8	28.7	17.1	7.6	.7	.2	439.9

TABLE LXXII - Continued

NZE PEAKS FOR VEL VS NZE BY ALT -3000 MIS-SEG MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7									1							1
1.6		1									1					2
1.5			1	2		1	1		1							6
1.4		2					1	1	1	3						8
1.3		1		1			1	1	1			1				6
1.2	4	1	1	1	1	1	1									10
0.8																
0.7																
0.6					1											
0.5								1								1
0.4																
0.2																
LESS																
SUM	4	5	2	4	2	2	4	3	4	3	1	1				35
TIME	2.4	2.3	3.5	2.9	1.5	2.1	2.1	3.4	3.2	1.9	.9	.4	0.0	0.0	0.0	26.7

NZE PEAKS FOR VEL VS NZE BY ALT -3000 MIS-SEG DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8									1							1
1.7											1					1
1.6		1			1		1	2			1					6
1.5			1			2	3	1	7	4	6	1				25
1.4		1	2	1	1	3	3	2	4	2						19
1.3		2	2	3	7	4	1	9	2	1		2				33
1.2	1		3		1	1	1	2								9
0.8																
0.7		1				1	1	1		1						5
0.6																
0.5																
0.4																
0.2																
LESS																
SUM	1	5	8	4	10	11	10	17	14	8	8	3				99
TIME	24.9	31.2	20.0	13.7	18.5	24.1	23.1	39.8	41.8	46.7	47.7	40.9	20.1	5.1	0.0	397.6

NZE PEAKS FOR VEL VS NZE BY ALT -3000 MIS-SEG STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7						1										1
1.6			1				1	1		2	1					6
1.5					1		1		2	1	2					7
1.4					1	3	1	7	3	4	1	1				21
1.3	2		1	1	1	1		1	3	3	2	1				16
1.2					3	1	1			3						8
0.8																
0.7							1									1
0.6						1										1
0.5																
0.4																
0.2																
LESS																
SUM	2		2	1	6	7	5	9	8	13	6	2				61
TIME	92.9	11.9	14.2	13.8	30.0	68.8	118.5	196.9	386.7	403.9	180.4	80.6	57.8	7.5	0.0	1663.8

TABLE LXXII - Continued

NZE PEAKS FOR VEL VS NZE BY ALT 0 MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8					1											1
1.7																
1.6					1											1
1.5		1	2				1	1			1		1			7
1.4		1	1	1			1	2	1					1		8
1.3		1														1
1.2											1					1
0.8																
0.7				1	1											2
0.6					1											1
0.5																
0.4																
0.2																
LESS																
SUM		3	3	2	4		2	3	1		2		1	1		22
TIME	7.7	10.0	16.4	13.6	16.9	17.1	20.8	15.2	21.6	8.0	3.8	3.7	2.3	.3	0.0	157.3

NZE PEAKS FOR VEL VS NZE BY ALT 0 MIS-SEG MANUVR

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8							1									1
1.7								1								1
1.6					1							2				3
1.5			1		1		1		1							4
1.4					1											1
1.3	1							1								2
1.2								1								1
0.8																
0.7				1				1								2
0.6						1										1
0.5																
0.4																
0.2																
LESS																
SUM	1		1	1	3	1	2	4	1			2				16
TIME	1.6	1.7	1.5	1.9	2.8	1.3	1.9	2.9	.8	.5	.7	.8	.2	0.0	0.0	18.6

NZE PEAKS FOR VEL VS NZE BY ALT 0 MIS-SEG DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6										1						1
1.5		2	1			3		1			1	1	1			10
1.4			3		3						1					7
1.3		1			1	1	1	1	1		2	1				9
1.2			2		1	1		1		1					1	7
0.8																
0.7					1			1		1		1	1	1		6
0.6							1									1
0.5																
0.4																
0.2																
LESS																
SUM		3	6		6	5	2	4	1	3	4	3	2	1	1	41
TIME	7.8	11.6	9.0	6.5	8.3	21.2	29.1	15.0	27.2	27.7	10.3	5.2	11.5	1.3	.2	192.0

TABLE LXXII - Continued

NZE PEAKS FOR VEL VS NZE BY ALT 0 MIS-SEG STEADY

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6					1			1	2		1					5
1.5									1		1	2				4
1.4																
1.3								2	3	1						6
1.2								1		1						2
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM					1			4	6	2	2	2				17
TIME	22.0	2.8	5.6	12.7	24.8	75.0	150.9	125.6	134.2	77.8	33.6	18.0	7.2	.6	0.0	690.9

NZE PEAKS FOR VEL VS NZE BY ALT 3000 MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5																
1.4										1	1					2
1.3																
1.2								1								1
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM								1		1	1					3
TIME	0.0	2.1	2.5	1.1	1.3	2.0	1.9	4.2	9.9	7.3	3.2	.1	0.0	0.0	0.0	35.5

NZE PEAKS FOR VEL VS NZE BY ALT 3000 MIS-SEG DESCNT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5									1							1
1.4			1													1
1.3		1						1		1						3
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM		1	1					1	1	1						5
TIME	0.0	.6	.8	.1	.1	.7	1.0	3.1	4.7	3.3	.7	10.8	12.0	0.0	0.0	38.1

TABLE LXXII - Concluded

NZE PEAKS FOR VEL VS NZE BY ALT 6000 MIS-SEG ASCENT

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8																
1.7																
1.6																
1.5																
1.4																
1.3			1													1
1.2																
0.8																
0.7																
0.6																
0.5																
0.4																
0.2																
LESS																
SUM			1													1
TIME	0.0	.1	.3	.5	.3	.6	.1	1.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	4.7

NZE PEAKS FOR VEL VS NZE SUM

	LESS	40	60	70	75	80	85	90	95	100	105	110	115	120	125	SUM
2.4																
2.2																
2.0																
1.8					1		1		2							4
1.7						3		1	5	2	1					12
1.6		4	4	1	5	6	11	7	4	5	6	2				55
1.5	1	4	8	2	5	12	11	14	22	10	11	4	2			106
1.4		5	8	3	8	8	18	21	15	14	7	6	1	1		115
1.3	3	9	7	5	1[illegible]	8	5	25	15	9	6	5	1	1		110
1.2	5	3	6	1	7	5	5	8		4	3	1	1		1	52
0.8																
0.7		1	1	2	4	3	6	7	2	6	1	3	1	1		38
0.6		1			2	[illegible]	1									6
0.5								1								1
0.4																
0.2																
LESS																
SUM	9	27	34	14	43	47	98	84	65	52	35	21	6	3	1	499
TIME	302.3	161.2	137.9	108.5	177.5	336.9	514.8	659.9	912.3	863.8	536.6	371.5	200.0	24.0	.4	5307.6

APPENDIX II
FCR TABULAR DATA PRESENTATION

Tables LXXIII through CXIII present the 36 hours of operational data processed by the FCR technique.

Four tabular formats present the flight time among the coincident ranges of ten parameters and the frequency of acceleration peaks distributed among the coincident ranges of other variables. All tabular formats are presented by mission segment for each flight condition. All times shown were rounded to the nearest tenth of a minute. Since in each subtable the total under the time column was computed and then rounded, a total may not agree with the sum of the rounded times in each line. Times between 0 and 0.05 minute were printed as ".0", and times equal to zero were printed as "0.0". Tables having neither occurrences nor time were not printed. All printed range values are the lower limits.

Tables LXXIII through LXXXVIII present time for coincident parameter values. Wherever a flight condition has more than one set of values, such a flight condition has multiple entries.

Tables XCIII through CXIII summarize the occurrence and duration of normal load factors for each flight condition. For example, Table CII for the left turn, level flight condition shows that 6 left turns had maximum load factor peaks between 1.2g and 1.3g, that 15 left turns had maximum load factor peaks between 1.1g and 1.2g, and that these 21 left turns had 10 additional load factor peaks, 9 between 1.1g and 1.2g and 1 between 0.8g and 0.9g.

TABLE LXXIII. TIME FOR TAKEOFF DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

TAKEOFF, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	284	10	-300	20	0	-3	-100	-100	-100	.38
BLW	314	10	-1200	0	-3000	-3	-100	-100	200	.07
BLW	314	10	-600	-20	-3000	-6	-100	-100	250	.07
BLW	314	10	-600	-20	-3000	3	-100	-100	200	.05
BLW	314	10	-600	-20	-3000	3	-100	-100	250	.09
BLW	314	10	-300	-80	BELOW	-3	-100	-100	100	.07
BLW	314	10	-300	-40	-6000	-3	-100	-100	200	.05
BLW	314	10	-300	0	-3000	-9	-100	-100	-100	.05
BLW	314	10	-300	0	-3000	-6	-100	-100	150	.07
BLW	314	10	-300	0	-3000	-3	-100	-100	-200	.07
BLW	314	10	-300	0	0	-3	-100	-100	150	.14
BLW	314	10	-300	20	0	-3	-100	-100	150	.21
BLW	314	20	-300	-80	BELOW	-3	-100	-100	-100	.02
BLW	314	20	-300	-60	-6000	-3	-100	-100	-100	.09
BLW	314	20	-300	0	-3000	-3	-100	-100	-100	.16
BLW	314	20	-300	0	0	-3	-100	-100	-100	.14
BLW	314	30	-300	-80	BELOW	-3	-100	-100	-100	.17
BLW	325	10	-600	-20	-3000	-3	-100	-100	150	.05
BLW	325	10	-300	-60	-6000	-3	-100	-100	150	.09
BLW	325	10	-300	-40	-6000	-3	-100	-100	250	.07
BLW	325	10	-300	-20	-6000	-3	-100	-100	250	.36
BLW	325	20	-600	-20	-3000	-12	-100	-100	-100	.02
BLW	325	20	-600	-20	-3000	3	-100	-100	-100	.05
BLW	325	20	-300	-60	-6000	-3	-100	-100	-100	.07
BLW	325	30	-300	-20	-6000	-3	-100	-100	-100	.17
BLW	334	10	-300	-40	-6000	-3	-100	-100	200	.19
BLW	334	10	-300	-20	-3000	-3	-100	-100	300	.17
BLW	334	20	-300	-40	-6000	-3	-100	-100	-100	.28
BLW	334	30	-300	-40	-6000	-3	-100	-100	-100	.03
BLW	334	30	-300	-40	-6000	-3	100	-100	-100	.05
BLW	334	30	-300	-20	-6000	-3	-100	-100	-100	.09

TAKEOFF, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	294	10	-300	-60	-6000	-3	-100	-100	100	.08
BLW	304	10	-300	-40	-6000	-3	-100	-100	100	.08
BLW	304	10	-300	20	-3000	-3	-100	-100	200	.25
BLW	314	10	-300	-60	BELOW	-3	-100	-100	100	.14
BLW	314	10	-300	-60	-6000	-3	-100	-100	150	.12
BLW	314	10	-300	-40	-6000	-3	-100	-100	100	.09
BLW	314	10	-300	-40	-6000	-3	-100	-100	150	.22
BLW	314	10	-300	0	-3000	-3	-100	-100	100	.15
BLW	314	10	-300	0	-3000	-3	-100	-100	250	.40
BLW	314	10	-300	0	-3000	-3	-100	-100	300	.10
BLW	314	10	-300	0	-3000	3	-100	-100	300	.08
BLW	314	10	-300	20	0	-3	-150	-100	-100	.12
BLW	314	10	-300	20	0	-3	-100	-100	200	.07
BLW	314	10	-300	20	0	-3	-100	-100	250	.05
BLW	314	10	-300	20	0	-3	-100	-100	300	.15
BLW	314	20	-900	-20	-6000	-3	-100	-100	150	.09
BLW	314	20	-300	-60	-6000	-3	-100	-100	-100	.09
BLW	314	20	-300	-40	-6000	-3	-100	-100	-100	.10
BLW	314	20	-300	20	0	-3	-100	-100	-100	.08

TABLE LXXIII - Continued

TAKEOFF, HOVER, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	20	0		-6	-100	-100	-100	.07
BLW	314	30	-300	20	0		3	-100	-100	-100	.15
BLW	325	10	-600	20	-3000		-3	-100	-100	250	.22
BLW	325	10	-300	-40	-6000		-3	-100	-100	200	.16
BLW	325	10	-300	0	-3000		-3	-100	-100	100	.16
BLW	325	10	-300	0	-3000		-3	-100	-100	150	.12
BLW	325	20	-300	0	-3000		-3	-100	-100	-100	.22
BLW	325	30	-300	-40	-6000		-3	-100	-100	-100	.05
BLW	334	10	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	334	20	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	334	30	-300	-60	-6000		-3	-150	-100	-100	.07
BLW	314	10	-600	-60	-6000		-6				.05
BLW	314	10	-600	-60	-6000		3				.07
BLW	314	20	-600	-60	-6000		-6				.05
BLW	325	20	-300	-40	-6000		-6				.07
BLW	325	30	-300	-40	-6000		-3				.05
BLW		10	-300	0	-3000		-3	-100	-100	-100	.09
BLW		10	-300	0	-3000		-3	-100	-100	100	.22
BLW		20	-300	0	-3000		-3	-100	-100	-100	.12

TAKEOFF, HOVER, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-600	20	-3000		-3	-100	-100	300	.16
BLW	314	10	-300	-40	-6000		-3	-100	-100	250	.14
BLW	314	10	-300	-20	-3000		-3	-100	-100	350	.15
BLW	314	10	-300	0	-3000		-3	-100	-100	300	.40
BLW	314	10	-300	0	-3000		-3	-100	-100	350	.08
BLW	314	10	-300	20	-3000		-3	-100	-100	300	.10
BLW	314	10	-300	20	-3000		3	-100	-100	150	.07
BLW	314	20	-600	20	-3000		-3	-100	-100	-100	.14
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.07
BLW	314	20	-300	-20	-3000		-3	-100	-100	100	.12
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.09
BLW	314	20	-300	20	-3000		-3	-100	-100	-100	.09
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	325	10	-600	-80	BELOW		-3	-100	-100	100	.13
BLW	325	10	-300	0	-3000		-3	-100	-100	-100	.10
BLW	325	10	-300	0	-3000		-3	-100	-100	100	.33
BLW	325	20	-600	-60	BELOW		-3	-100	-100	-100	.07
BLW	325	20	-600	-60	BELOW		-3	-100	-100	300	.09
BLW	325	20	-300	-80	BELOW		-3	-100	-100	-100	.14
BLW	325	20	-300	-60	-6000		-3	-100	-100	100	.07
BLW	325	20	-300	-40	-6000		-3	-100	-100	-100	.09
BLW	325	20	-300	0	-3000		3	-100	-100	-100	.07
BLW	325	30	-600	-60	BELOW		-3	-100	-100	-100	.14
BLW	325	30	-300	-40	-6000		-3	-100	-100	-100	.09
BLW	325	30	-300	0	-3000		-6	-100	-100	-100	.05

TABLE LXXIII - Concluded

TAKEOFF, ASCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-600	-40	-3000	-3	-100	-100	150	.09
BLW	314	10	-300	-60	-6000	-3	-100	-100	100	.09
BLW	314	30	-600	-40	-3000	3	-100	-100	-100	.10
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
BLW	314	40	-300	-60	-6000	-3	-100	-100	-100	.05

TAKEOFF, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-900	-40	-6000	3	-100	-100	150	.03
BLW	314	10	-900	-20	-3000	-3	-100	-100	150	.08
BLW	314	10	-300	-60	-6000	-3	-100	-100	100	.40
BLW	314	10	-300	-60	-6000	-3	-100	-100	150	.09
BLW	314	10	-300	-40	-3000	-3	-100	-100	150	.09
BLW	314	10	-300	-20	-3000	-3	-100	-100	250	.09
BLW	314	10	-300	0	-3000	-3	-100	-100	-150	.12
BLW	314	10	-300	0	-3000	-3	-100	-100	-100	.19
BLW	314	10	-300	0	-3000	-3	-100	-100	200	.09
BLW	314	20	-300	0	-3000	-3	-100	-100	250	.07
BLW	314	20	300	-60	-6000	-3	-100	-100	-100	.05
BLW	325	10	-300	0	-3000	-3	-100	-100	100	.07
BLW	325	10	-300	20	0	-3	-100	-100	250	.26

TAKEOFF, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-600	0	-3000	-6	-100	-100	350	.05
BLW	314	10	-600	0	-3000	-3	-100	-100	150	.07
BLW	314	10	-600	0	-3000	-3	-100	-100	300	.07
BLW	314	10	-600	0	-3000	3	-100	-100	300	.07
BLW	314	10	-300	0	-3000	-3	-100	-100	300	.24
BLW	314	10	-300	0	0	-3	-100	-100	150	.08
BLW	314	10	-300	0	0	-3	-100	-100	300	.08
BLW	325	10	-300	0	-3000	-3	-100	-100	-100	.10
BLW	325	20	-300	0	-3000	-6	-100	-100	-100	.07

TAKEOFF, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-900	20	0	-3	-100	-100	150	.07
BLW	314	10	-900	20	0	-3	-100	-100	300	.10
BLW	314	10	-300	0	-3000	-3	-100	-100	-100	.08
BLW	314	10	-300	0	-3000	-3	-100	-100	300	.12
BLW	325	20	-600	-80	BELOW	-3	-100	-100	100	.14
BLW	325	30	-600	-80	BELOW	-3	-100	-100	-100	.09

TABLE LXXIV. TIME FOR GROUND TAXI DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

GROUND TAXI, GRD CONDITION, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	-60	-6000		-3	-100	-100	150	.14
BLW	314	10	-300	-60	-6000		-3	-100	-100	200	.14
BLW	314	20	-300	-60	BELOW		-3	-100	-100	-100	.17
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.65
BLW	314	20	-300	-60	-6000		-3	-100	-100	100	.07
BLW	314	20	300	-20	-3000		-3	-100	-100	-100	.09
BLW	314	30	300	-20	-3000		-3	-100	-100	-100	.07
BLW	325	20	-300	-60	-6000		-3	-100	-100	100	.26
BLW	325	20	-300	-40	-3000		-3	-100	-100	-100	.17
BLW	325	30	-300	-80	BELOW		-3	-100	-100	-100	.41
BLW	325	30	-300	-40	-3000		-3	-100	-100	-100	.22
BLW	314	10	-300	-80	BELOW		-3				.26
BLW	314	20	-300	-80	BELOW		-3				.55
BLW	314	30	-300	-80	BELOW		-3				.09

GROUND TAXI, GRD CONDITION, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	0	-3000		-3	-100	-100	-100	.33
BLW	314	20	-300	-60	BELOW		-3	-100	-100	-100	.26
BLW	314	20	-300	-60	BELOW		-3	100	-100	-100	.47
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.26
BLW	314	30	-300	-80	BELOW		-3	-100	-100	-100	.31
BLW	314	30	-300	-60	BELOW		-3	-100	-100	-100	.10
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	.09
BLW	325	10	-300	0	-3000		-3	-100	-100	100	.12
BLW	325	20	-300	20	0		-3	-100	-100	-100	.52
BLW	325	30	-300	20	-3000		-3	-100	-100	-100	.63
BLW	325	30	-300	40	-3000		-3	-100	-100	-100	.47
BLW	325	10	-300	-40	-6000		-3				.09
BLW	325	20	-300	-40	-6000		-3				.34
BLW	325	20	-300	-40	-6000		-3				.14
BLW	325	30	-300	-40	-6000		-3				.16

GROUND TAXI, GRD CONDITION, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	-60	-6000		-3	-100	-100	150	.17
BLW	314	20	-300	-60	-6000		-3	-100	-100	100	.17
BLW	325	20	-300	-80	BELOW		-3	-100	-100	150	.21
BLW	325	30	-300	-80	BELOW		-3	-100	-100	-100	.65

TABLE LXXV. TIME FOR INITIATION OF ASCENT DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

INITIATION OF ASCENT, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000	-3	-100	-100	100	.09
BLW	314	20	-300	0	-3000	-6	-100	-100	-100	.08
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.21
BLW	314	30	-300	-20	-3000	3	-100	-100	-100	.07
BLW	314	30	-300	-20	-3000	3	100	-100	-100	.09
BLW	314	30	-300	-20	-3000	9	150	-100	-100	.03
BLW	314	30	-300	0	-3000	-6	-100	-100	-100	.08
BLW	314	30	-300	0	-3000	-3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000	3	-100	-100	-100	.17
BLW	314	30	-300	0	-3000	6	-100	-100	-100	.08
BLW	314	30	-300	0	-3000	6	100	-100	-100	.05
BLW	314	30	-300	0	0	-3	-100	-100	-100	.16
BLW	314	30	-300	0	0	6	-100	-100	-100	.05
BLW	314	40	-300	-40	-6000	3	-100	-100	-100	.07
BLW	325	20	-300	-20	-3000	-3	100	100	-100	.09
BLW	325	30	-300	-60	-6000	-3	-100	-100	-100	.14
BLW	325	30	-300	-60	-6000	-3	100	-100	-100	.05
BLW	325	30	-300	-60	-6000	3	100	-100	-100	.09
BLW	325	30	-300	-20	-3000	-3	-100	-100	-100	.09
BLW	334	20	-300	-20	-6000	-3	-100	-100	-100	.12
BLW	334	30	-300	-20	-3000	-3	-100	-100	-100	.26
BLW	334	30	600	-40	-6000	3	-100	-100	-100	.19
BLW	334	40	-300	-20	-3000	3	-100	-100	-100	.07
40	314	30	-300	-20	-3000	9	150	-100	-100	.03

INITIATION OF ASCENT, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	294	40	300	20	-3000	6	-100	-100	-100	.03
BLW	304	30	300	20	-3000	3	-100	-100	-100	.13
BLW	304	40	300	20	-3000	3	-100	-100	-100	.07
BLW	314	20	-300	0	-3000	-3	-100	-100	-100	.07
BLW	314	30	-300	-40	-6000	6	-100	-100	-100	.09
BLW	314	30	-300	0	-3000	3	-100	-100	-100	.05
BLW	314	30	300	20	0	-3	-100	-100	-100	.03
BLW	314	30	300	20	0	3	-100	-100	-100	.08
BLW	314	40	-300	-60	BELOW	-3	-100	-100	-100	.09
BLW	314	40	300	-60	-6000	-3	-100	-100	-100	.15
BLW	325	30	-300	20	-3000	6	-100	-100	-100	.14
BLW	325	30	300	-20	-3000	-3	-100	-100	-100	.09
BLW	325	30	300	-20	-3000	3	150	-100	-100	.03
BLW	325	30	600	-40	-6000	-3	-100	-100	-100	0.00
BLW	325	30	600	-40	-6000	3	-100	-100	-100	.07
BLW	334	40	-900	-60	-6000	-3	-100	-100	-100	.05
40	314	30	-300	-40	-6000	3	100	-100	-100	.09
40	325	30	-600	-40	-6000	-3	-100	-100	-100	.17
40	325	40	-600	-40	-6000	3	-100	-100	-100	.03
40	325	40	600	-40	-6000	3	-100	-100	-100	.12
BLW	314	20	-300	-60	-6000	3				.05
BLW	314	30	-300	-60	-6000	-3				.05
BLW	314	30	-300	-60	-6000	3				.05
BLW	314	40	-300	-60	-6000	6				.10
BLW	314	40	300	-40	-6000	-9				.09
BLW	314	40	300	-40	-6000	6				.03
BLW	325	40	300	-40	-6000	3				.09
BLW		40	900	0	-3000	-3	-100	-100	-100	.09

TABLE LXXV - Continued

INITIATION OF ASCENT, HOVER, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-20	-3000		3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.10
BLW	314	30	-300	20	-3000		-3	-100	-100	-100	.09
BLW	314	30	300	0	-3000		-3	-100	-100	-100	.09
BLW	314	30	600	-20	-3000		-3	-100	-100	-100	.09
BLW	314	30	600	0	-3000		-3	-100	-100	-100	.14
BLW	314	30	600	0	-3000		6	100	-100	-100	.07
BLW	314	30	900	0	-3000		-3	-100	-100	-100	.03
BLW	314	30	900	0	-3000		6	-100	-100	-100	.14
BLW	314	40	300	-60	BELOW		-3	-100	-100	-100	.03
BLW	314	40	300	-40	-6000		-3	-100	-100	-100	.14
BLW	325	30	-300	-20	-3000		3	-100	-100	-100	.12
BLW	325	30	-300	0	-3000		-3	-100	-100	-100	.07
BLW	325	40	-300	-80	BELOW		-3	-100	-100	-100	.07
BLW	325	40	-300	-60	BELOW		-3	-100	-100	-100	.03
BLW	325	40	-300	-40	BELOW		-3	-100	-100	-100	.03
BLW	325	40	300	-40	-6000		-3	-100	-100	-100	.09
BLW	325	50	-300	-60	BELOW		-6	-100	-100	-100	.02
BLW	325	50	-300	-60	BELOW		3	-100	-100	-100	.03
BLW	325	50	-300	-60	BELOW		3	100	-100	-100	.03
BLW	325	50	-300	-40	BELOW		-3	-100	-100	-100	.14

INITIATION OF ASCENT, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.11
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.10
BLW	314	20	300	-60	-6000		-3	-100	-100	-100	.05
BLW	314	20	300	-20	-3000		-3	-100	-100	-100	.17
BLW	314	20	900	-40	-6000		-3	-100	-100	-100	.09
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.12
BLW	314	30	-300	-60	-6000		3	-100	-100	-100	.13
BLW	314	30	-300	-60	-6000		6	-100	-100	-100	.09
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.12
BLW	314	30	300	-80	BELOW		9	-100	-100	-100	.07
BLW	314	30	300	-20	-3000		6	-100	-100	-100	.05
BLW	314	40	-300	-60	-6000		-3	-100	-100	-100	.18
BLW	314	40	300	-60	-6000		6	-100	-100	-100	.09
BLW	314	40	900	-40	-6000		6	-100	-100	-100	.03
BLW	325	20	300	0	-3000		-3	-100	-100	-100	.16
BLW	325	30	300	-20	-3000		-3	-100	-100	-100	.11
40	314	30	300	-20	-3000		6	-100	-100	-100	.04
40	314	40	300	-80	BELOW		3	100	-100	-100	.07
40	314	40	300	-20	-3000		-3	100	-100	-100	.03
40	314	40	300	-20	-3000		3	-100	-100	-100	.09
60	314	30	300	-20	-3000		6	100	-100	-100	.04
60	314	40	300	-80	BELOW		3	100	-100	-100	.07

TABLE LXXV - Concluded

INITIATION OF ASCENT, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	300	0	-3000		-3	-100	-100	-100	.05
BLW	314	20	-300	0	-3000		3	-100	-100	-100	.08
BLW	314	20	-300	0	0		3	-100	-100	-100	.14
BLW	314	30	-300	0	-3000		6	-100	-100	-100	.10
BLW	314	40	-300	0	-3000		-3	-100	-100	-100	.07
BLW	325	30	-300	0	-3000		3	-100	-100	-100	.07

INITIATION OF ASCENT, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	20	0		3	-100	-100	-100	.12
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	.05
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.12
BLW	314	30	-300	20	0		-3	150	-100	-100	.05
BLW	314	30	-300	20	0		3	150	-100	-100	.03
BLW	325	40	600	-80	BELOW		-3	-100	-100	-100	.10
BLW	325	40	600	-80	BELOW		3	100	-100	-100	.05
40	325	40	600	-80	BELOW		3	100	-100	-100	.14

TABLE LXXVI. TIME FOR LEFT TURN DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

LEFT TURN, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-40	BELOW	-3	-100	-100	-100	.43
BLW	314	30	-300	20	-3000	-3	-100	-150	-100	.08
BLW	314	30	-300	20	-3000	-3	-100	-100	-100	.35
BLW	325	30	-300	-60	BELOW	-3	-100	-100	-100	.23
BLW	334	30	-300	-20	-6000	-3	-100	-100	-100	.38

LEFT TURN, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-80	BELOW	-3	-100	-100	-100	.31
BLW	314	30	-300	-20	-6000	-6	150	-100	-100	.09
BLW	314	30	-300	-20	-6000	-3	100	-100	-100	.09
BLW	314	30	-300	-20	-6000	9	-100	-100	-100	.02
BLW	314	30	-300	0	-3000	-6	-150	-100	-100	.06
BLW	314	30	-300	0	-3000	-3	-100	-100	-100	.08
BLW	314	40	-300	-20	-6000	-3	100	-100	-100	.17
BLW	314	40	-300	-20	-6000	-3	150	-100	-100	.09
BLW	314	40	-300	-20	-6000	-3	200	-100	-100	.09
BLW	314	60	-300	-20	-6000	-3	100	-100	-100	.03
40	314	40	-300	-20	-6000	-3	100	-100	-100	.09
40	314	60	-300	-20	-6000	-3	100	-100	-100	.05

LEFT TURN, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	30	300	-40	-3000	-3	-100	-100	-100	.17
60	314	20	-300	-40	-3000	-3	-100	-100	-100	.09
60	314	20	300	-40	-3000	-3	-100	-100	-100	.09
60	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
60	314	30	-300	-40	-3000	-3	-100	100	-100	.09
60	314	30	-300	-40	-3000	3	-100	100	-100	.04
60	314	30	300	-40	-3000	-3	-100	-100	-100	.52
60	325	20	-300	-20	0	-3	-100	100	-100	.09
70	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
70	314	30	-300	-40	-3000	-3	-100	100	-100	.09
70	314	30	-300	-40	-3000	3	-100	100	-100	.04
70	314	30	300	-40	-3000	-3	-100	-100	-100	.17
70	325	20	-300	-20	0	-6	-100	100	-100	.04
70	325	20	-300	-20	0	-3	-100	100	-100	.09
75	314	30	-300	-40	-3000	-3	-100	100	-100	.17
75	314	40	600	-60	-6000	-3	-100	-100	-100	.09
75	314	40	600	-40	-3000	-3	-100	-100	-100	.17
75	325	20	-300	-20	0	-6	-100	100	-100	.04
75	325	20	-300	-20	0	-3	-100	100	-100	.05
80	314	30	-300	-40	-3000	-6	-100	-100	-100	.04
80	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
80	314	30	-300	-40	-3000	-3	-100	100	-100	.17
80	314	30	-300	-40	0	-3	-100	100	-100	.09
80	314	30	600	-40	-3000	-3	-100	-100	-100	.09
80	314	40	600	-60	-6000	-3	-100	-100	-100	.22
80	314	40	600	-40	-3000	-6	-100	-100	-100	.04
80	325	20	-300	-20	0	-3	-100	150	-100	.05
80	325	40	900	-60	-6000	-3	100	-100	-100	.09
85	314	30	-300	-40	-3000	-6	-100	-100	-100	.04

TABLE LXXVI - Continued

LEFT TURN, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
85	314	30	-300	-40	-3000		-3	-100	-100	-100	.19
85	314	30	-300	-40	-3000		-3	-100	100	-100	.17
85	314	30	-300	-40	0		-3	-100	100	-100	.12
85	314	30	600	-40	-3000		-3	-100	-100	-100	.05
85	314	40	600	-60	-6000		-3	-100	-100	-100	.04
85	325	30	900	-60	-6000		-3	100	-100	-150	.05
85	325	40	900	-60	-6000		-3	100	-100	-100	.09
90	314	30	-300	-40	-3000		-6	-100	-100	-100	.04
90	314	30	-300	-40	-3000		-3	-100	-100	-100	.09
90	314	30	-300	-40	-3000		-3	-100	100	-100	.09
90	314	30	-300	-40	0		-3	-100	100	-100	.09
90	314	40	600	-60	-6000		-3	-100	-100	-100	.05
90	314	40	[illegible]	-40	-3000		-6	-100	-100	-100	.04
90	325	40	900	-60	-6000		-3	100	-100	-100	.09
95	314	30	-300	-40	-3000		-6	-100	-100	-100	.04
95	314	30	-300	-40	-3000		-3	-100	-100	-100	.17
95	314	30	-300	-40	0		-3	-100	100	-100	.03
95	314	40	600	-40	-3000		-3	-100	-100	-100	.09
105	314	30	300	-40	-6000		-3	100	100	-150	.09
105	314	30	300	-20	-6000		-3	100	100	-150	.03
110	314	30	300	-40	-6000		-3	150	-100	-100	.09
110	314	30	300	-20	-6000		-3	150	-100	-100	.09
110	325	30	300	-20	-6000		-3	100	100	-100	.09

LEFT TURN, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
60	325	30	300	-80	BELOW		-3	-100	-100	-100	.13
70	325	40	300	-80	BELOW		-3	100	-100	-100	.23
75	325	40	300	-80	BELOW		-3	-100	-100	-100	.05

LEFT TURN, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
60	325	40	300	-80	BELOW		-3	[illegible]	-100	-100	.29
60	325	40	600	-80	BELOW		-3	-100	-100	-100	.11
70	314	20	-300	0	-3000		-3	-100	-100	-100	.09
70	314	30	-300	0	-3000		-3	100	-100	-100	.09
70	314	30	-300	0	-3000		-3	150	-100	-100	.17
70	314	30	-300	0	-3000		-3	200	-100	-100	.09
70	325	40	600	-80	BELOW		-3	-100	-100	-100	.02
70	325	40	600	-80	BELOW		-3	100	-100	-100	.18
75	314	20	-300	0	-3000		-3	-100	-100	-100	.09
75	314	20	-300	0	-3000		-3	100	100	-100	.10
75	314	30	-300	0	-3000		-3	100	-100	-100	.09
75	314	30	-300	0	-3000		-3	150	-100	-100	.09
75	314	30	-300	0	-3000		-3	150	100	-100	.05
75	314	40	600	-60	-6000		-3	-100	-100	-100	.26
75	314	40	600	-60	-6000		-3	100	-100	-100	.09
80	314	40	600	-60	-6000		-3	-100	100	-100	.09
80	314	40	600	-60	-6000		-3	100	-100	-100	.09
80	314	40	600	-60	-6000		-3	100	100	-100	.09
90	314	40	300	-60	BELOW		-3	200	-100	-150	.09

TABLE LXXVI - Continued

LEFT TURN, ASCENT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
90	314	40	300	-60	BELOW		-3	200	-100	-100	.09
95	314	40	300	-60	BELOW		-3	150	-100	-100	.04
95	314	40	300	-40	BELOW		-3	200	-100	-100	.09
95	314	40	300	-40	-6000		-3	150	-100	-150	.09
100	314	40	300	-60	BELOW		-3	150	100	-100	.04
100	314	40	300	-40	-6000		-3	150	100	-150	.09
105	314	40	-300	-40	-6000		-3	150	-100	-150	.09
105	314	40	-300	-40	-6000		-3	150	-100	-100	.17
105	314	40	-300	-40	-6000		-3	150	100	-100	.12
105	314	40	300	-40	-6000		-3	150	100	-150	.09
105	314	40	300	-40	-6000		-3	150	100	-100	.09
105	314	40	300	-40	-6000		-3	200	-100	-100	.09
110	314	40	-300	-40	-6000		-3	150	-100	-100	.17

LEFT TURN, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-300	-80	-6000		-3	-100	-100	-100	.27
40	314	20	-300	-60	-6000		-3	-100	-100	-100	.27
40	314	30	-300	-60	-6000		-3	-100	-100	-100	.18
60	314	20	-300	-80	-6000		-3	-100	-100	-100	.15
60	314	30	-300	-80	-6000		-6	-100	-100	-100	.09
60	314	30	-300	-80	-6000		-3	-100	-100	-100	.27
60	314	30	-300	-60	-6000		-3	-100	-100	-100	.09
70	314	20	-300	-80	-6000		-3	-100	-100	-100	.18
70	314	30	-300	-80	-6000		-3	-100	-100	-100	.05
75	314	30	-300	-80	BELOW		-3	-100	-100	-100	.09
75	314	30	-300	-80	-6000		-3	-100	-100	-100	.14
80	314	30	-300	-80	-6000		-3	-100	-100	-100	.09

LEFT TURN, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-80	-6000		-3	-100	-100	-100	.20
BLW	314	20	-300	-40	-3000		-3	-100	-100	-100	.09
BLW	314	20	-300	-40	-3000		-3	100	-100	-100	.09
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	314	30	-300	-60	-6000		-3	100	-100	-100	.09
BLW	314	30	-300	-60	-6000		3	-100	-100	-100	.09
BLW	314	30	-300	-40	-3000		-3	-100	-100	-100	.23
BLW	314	30	-300	-40	-3000		-3	100	-100	-100	.07
40	314	20	-300	-80	-6000		-6	-100	-100	-100	.09
40	314	20	-300	-80	-6000		-3	-100	-100	-100	.56
40	314	20	-300	-80	-6000		-3	-100	-100	100	.07
40	314	20	-300	-80	-6000		3	-100	-100	-100	.09
40	314	20	-300	-60	-6000		-3	-100	-100	-100	.09
40	314	30	-300	-60	-6000		-3	-100	-100	-100	.27
40	314	30	-300	-60	-6000		3	-100	-100	-100	.09
40	314	30	-300	-40	-6000		-3	-100	-100	-100	.09
40	314	30	-300	-40	-3000		-3	-100	-100	-100	.09
60	314	20	-300	-80	-6000		-3	-100	-100	-100	.18
60	314	20	-300	-60	-6000		-3	-100	-100	-100	.16

TABLE LXXVI - Continued

LEFT TURN, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	30	-300	-60	-6000	-3	-100	-100	-100	.18
60	314	30	-300	0	6000	-3	-100	-100	-100	.18
70	314	20	-300	-60	-6000	-3	-100	-100	-100	.18
70	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
70	314	30	-300	0	6000	-3	-100	-100	-100	.09
75	314	20	-300	0	6000	-3	-100	-100	-100	.05
85	314	20	-300	-20	0	-3	-100	100	-100	.26
85	314	20	-300	0	0	-3	-100	100	-100	.09
85	325	20	-300	-20	0	-3	-100	100	-100	.05
85	325	20	-300	-20	0	-3	100	100	-100	.09
90	314	20	-300	-20	0	-3	-100	100	-100	.09
90	314	30	-900	-60	-3000	-3	-100	100	-150	.09
90	325	20	-300	-20	0	-3	-100	100	-100	.09
95	314	30	-900	-60	-3000	-3	-100	100	-150	.19
95	314	30	-600	-60	-3000	-3	-100	100	-150	.09
95	314	30	-300	-80	-6000	-3	-100	-100	-100	.16
95	314	30	-300	-80	-6000	-3	100	-100	-100	.09
95	314	30	-300	-60	-3000	-3	-100	100	-200	.24
95	314	30	-300	-60	0	-3	-100	100	-200	.19
95	314	30	300	-60	-3000	-3	-100	100	-200	.10
95	314	40	-300	-80	-6000	-3	-100	-100	-100	.09
95	314	40	-300	-80	-6000	-3	100	-100	-100	.09
95	314	40	-300	-60	0	-3	-100	100	-200	.09
95	325	30	-300	-80	-6000	-3	-100	-100	-100	.18
100	314	30	-600	-60	-3000	-3	-100	-100	-150	.17
100	314	40	-300	-60	-3000	-3	-100	-100	-200	.26
100	314	40	-300	-60	-3000	-3	-100	100	-200	.17
100	325	30	-300	-80	-6000	-3	100	-100	-100	.07
105	314	30	-300	-60	-3000	-3	-100	-100	-100	.14
105	314	30	-300	-60	-3000	-3	-100	100	-100	.09
105	314	40	-300	-60	-3000	-3	100	-100	-100	.09
110	314	30	-300	-60	-3000	-3	-100	-100	-100	.09
110	314	40	-300	-60	-3000	-3	100	-100	-100	.09
105	314	30	-300	-40	-3000	-3				.09
105	314	30	-300	-40	-3000	-3				.09
105	314	30	-300	-40	-3000	-3				.28

LEFT TURN, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-300	-40	-6000	-3	-100	-100	-100	.09
40	314	30	-300	-40	-6000	-3	100	-100	-100	.17
40	314	30	-300	-40	-6000	-3	150	-100	-100	.26
40	314	40	-300	-40	-6000	-3	100	-100	-100	.07
40	314	40	-300	-20	-6000	-3	150	-100	-100	.09
40	314	40	-300	-20	-6000	3	150	-100	-100	.09
60	314	20	-300	-40	-6000	-6	-100	-100	100	.09
60	314	20	-300	0	0	-3	100	-100	-100	.17
60	314	40	-300	-40	-6000	-3	150	-100	-100	.17
60	325	20	300	-80	-3000	-3	-100	-100	-100	.09
60	325	40	300	90	-3000	-3	-100	-100	-150	.09
70	314	20	300	-40	-6000	-3	100	-100	-100	.09
70	314	20	300	0	-3000	-3	150	-100	-100	.22
70	314	20	-300	0	0	-3	100	-100	-100	.08

TABLE LXXVI - Continued

LEFT TURN, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	20	300	0	0		-3	-100	-100	-100	.08
70	314	30	-300	-40	-6000		-3	100	-100	-100	.43
70	314	30	-300	-40	-6000		-3	150	-100	-100	.09
70	314	30	-300	0	-3000		-3	150	-100	-100	.09
70	314	30	-300	0	0		-6	100	-100	-100	.04
70	325	20	-300	20	0		-3	100	-100	-100	.07
70	325	20	-300	20	0		-3	100	-100	100	.07
70	325	30	-300	-80	-3000		-3	-100	-100	-150	.09
70	325	30	-300	-80	-3000		-3	-100	-100	-100	.04
70	325	30	300	-80	-3000		-3	-100	100	-150	.09
70	325	40	-300	-80	-3000		-3	-100	-100	-150	.09
70	325	40	-300	-80	-3000		-3	-100	-100	-100	.09
70	325	40	300	-80	-3000		-3	-100	-100	-150	.09
70	325	40	300	-80	-3000		-3	-100	-100	-100	.09
75	314	20	-300	0	-3000		-3	150	-100	-100	.33
75	314	20	-300	0	0		-3	100	-100	-100	.24
75	314	20	300	0	0		-3	100	-100	-100	.17
75	314	30	-300	-40	-6000		-3	100	-100	-100	.22
75	314	30	-300	-40	-6000		-3	150	-100	-100	.26
75	314	30	-300	0	-3000		-3	150	-100	-100	.09
75	314	30	-300	0	0		-6	150	-100	-100	.04
75	325	20	-300	20	0		-3	100	-100	-100	.12
75	325	30	-300	-80	-3000		-3	-100	-100	-100	.04
75	325	30	-300	-80	-3000		-3	-100	100	-150	.09
75	325	30	300	-80	-3000		-3	-100	100	-150	.09
75	325	30	300	-80	-3000		3	-100	100	-150	.04
75	325	40	-300	-80	-3000		-3	-100	-100	-150	.09
80	314	10	-300	0	0		-3	100	-100	-100	.07
80	314	20	-300	0	-3000		-3	100	-100	-100	.17
80	314	20	-300	0	-3000		-3	150	-100	-100	.43
80	314	20	-300	0	0		-3	100	-100	-100	.34
80	314	30	-300	-40	-6000		-3	100	-100	-100	.16
80	314	30	-300	-40	-6000		-3	150	-100	-100	.09
80	314	30	-300	0	-3000		-3	150	-100	-100	.19
80	325	20	-300	-20	0		-3	-100	100	-100	.05
80	325	20	-300	0	0		-3	-100	100	-100	.09
80	325	20	-300	20	0		-3	-100	-100	-100	.07
80	325	20	-300	20	0		-3	100	-100	100	.07
80	325	20	-300	40	0		-3	-100	-100	-100	.07
80	325	30	-300	-80	-3000		-3	-100	-100	-150	.27
80	325	30	-300	-80	-3000		-3	-100	-100	-100	.04
80	325	40	-300	-80	-3000		-3	-100	-100	-150	.09
85	314	20	-300	0	-3000		-3	100	-100	-100	.52
85	314	20	-300	0	-3000		-3	150	-100	-100	.17
85	314	20	-300	0	0		-3	-100	100	-100	.26
85	314	20	-300	0	0		-3	100	-100	-100	.17
85	314	30	-300	0	-3000		-3	150	-100	-100	.55
85	325	30	-300	-80	-3000		-3	-100	-100	-100	.16
85	325	40	-300	-80	-3000		-3	-100	-100	-150	.05
85	325	40	-300	-80	-3000		-3	-100	-100	-100	.09
90	314	20	-300	0	-3000		-3	100	-100	-100	.19
90	314	20	-300	0	0		-3	-100	100	-100	.09
90	314	40	-300	-80	-6000		-3	-100	-100	-100	.07
90	314	40	-300	-40	-6000		-3	150	-100	-100	.09

TABLE LXXVI - Continued

LEFT TURN, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
90	325	40	-300	-80	-3000	-3	-100	-100	-150	.09
95	314	30	-300	-60	-6000	-3	-100	-100	-100	.14
95	314	30	-300	-60	-3000	-3	-100	100	-200	.09
95	314	30	-300	-60	-3000	-3	-100	100	-150	.09
95	314	30	-300	-40	-6000	-3	-100	-100	-100	.17
95	314	30	-300	-40	-6000	-3	100	-100	-100	.09
95	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
95	314	40	-300	-80	-6000	-3	-100	-100	-100	.26
95	314	40	-300	-80	-3000	-3	-100	-100	-100	.05
95	314	40	-300	-60	-3000	-3	-100	100	-150	.26
95	314	40	-300	-40	-6000	-3	100	100	-100	.09
95	325	40	-300	-60	-3000	-3	-100	100	-150	.29
100	314	30	-300	-60	-3000	-3	-100	100	-150	.09
100	314	30	-300	-40	-6000	-6	150	-100	-100	.04
100	314	30	-300	-40	-6000	-3	-100	-100	-100	.09
100	314	30	-300	20	0	-3	100	-100	-100	.07
100	314	40	-300	-80	-3000	-3	-100	-100	-100	.17
100	314	40	-300	-80	-3000	-3	100	-100	-100	.09
100	314	40	-300	-60	-3000	-3	-100	-100	-150	.22
100	314	40	-300	-60	-3000	-3	-100	100	-150	.07
100	314	40	-300	-40	-6000	-3	150	100	-100	.07
100	325	40	-300	-60	-3000	-3	-100	-100	-150	.09
105	314	30	-300	-40	BELOW	-6	150	-100	-100	.04
105	314	30	-300	20	0	-3	100	-100	-100	.35
105	314	40	-300	-40	BELOW	-3	150	-100	-100	.09
105	325	30	-300	20	0	-3	100	-100	-100	.43
105	325	30	-300	20	0	-3	150	-100	-100	.07
110	314	40	-300	-40	BELOW	-3	150	-100	-100	.09
110	325	30	-300	20	0	-3	150	-100	-100	.07
100	314	30	300	-60	-6000	3				.04
105	314	30	300	-60	-6000	-3				.09
105	314	30	300	-60	-6000	3				.04
110	314	30	300	-60	-6000	-3				.07

LEFT TURN, LEVEL FLIGHT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	10	-300	0	0	-3	150	-100	-100	.03
70	314	20	-300	0	0	-3	100	-100	-100	.09
70	314	20	-300	0	0	-3	150	-100	-100	.09
75	314	20	-300	0	-3000	-3	-100	-100	-100	.09
75	314	20	-300	0	-3000	-3	-100	100	-100	.17
75	314	20	-300	0	-3000	-3	100	100	-100	.26
75	314	20	-300	0	0	-3	-100	100	-100	.10
75	314	20	-300	0	0	-3	100	-100	-100	.09
75	314	20	-300	0	0	-3	150	-100	-100	.17
75	314	20	-300	0	0	-3	150	100	-100	.09
75	314	20	-300	20	0	-3	100	-100	-100	.17
80	314	20	-300	0	-3000	-3	-100	100	-100	.09
80	314	20	-300	0	-3000	-3	100	-100	-100	.09
80	314	20	-300	0	-3000	-3	100	100	-100	.09
80	314	20	-300	0	0	-3	100	-100	-100	.26
80	314	20	-300	0	0	-3	100	100	-100	.17
80	314	20	-300	0	0	-3	150	-100	-100	.09

TABLE LXXVI - Continued

LEFT TURN, LEVEL FLIGHT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	20	-300	0	0	-3	150	100	-100	.26
80	314	20	-300	20	0	-3	150	-100	-100	.17
80	314	20	-300	20	0	-3	150	100	-100	.10
85	314	20	-300	0	0	-3	100	-100	-100	.17
85	314	20	-300	0	0	-3	100	100	-100	.09
95	314	30	-300	-40	-6000	-3	100	-100	-100	.07
95	314	30	-300	-40	-3000	-3	-100	-100	-100	.21
95	314	30	-300	-40	-3000	-3	-100	100	-100	.09
95	314	30	-300	-40	-3000	-3	100	-100	-100	.17
100	314	30	-300	-40	-6000	-3	100	-100	-100	.52
100	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
100	314	30	-300	-40	-3000	-3	-100	100	-100	.09
100	314	30	-300	-40	-3000	-3	100	-100	-100	.28
100	314	30	-300	-20	-3000	-3	-100	-100	-100	.09
100	314	30	-300	-20	-3000	-3	100	-100	-100	.17
100	314	40	-300	-40	BELOW	-3	150	-100	-100	.09
100	314	40	-300	-40	BELOW	3	150	-100	-100	.04
100	314	40	-300	-40	-6000	-3	150	-100	-100	.09
100	314	40	300	-40	BELOW	-3	150	-100	-100	.21
105	314	30	-300	-60	-6000	-3	-100	100	-100	.34
105	314	30	-300	-40	-6000	-3	100	-100	-100	.09
105	314	30	-300	-20	-3000	-3	-100	-100	-100	.09
105	314	30	-300	-20	-3000	-3	100	100	-150	.09
105	314	40	-300	-40	BELOW	-3	150	-100	-100	.72
105	314	40	-300	-40	BELOW	-3	200	-100	-100	.17
105	314	40	-300	-40	BELOW	3	150	-100	-100	.04
105	314	40	-300	-40	-6000	-6	200	-100	-100	.04
105	314	40	-300	-40	-6000	-3	150	-100	-100	.03
105	314	40	300	-40	BELOW	-3	150	-100	-100	.09
105	314	40	300	-40	-6000	-3	150	-100	-100	.09
110	314	30	-300	-20	-3000	-3	-100	-100	-100	.05
110	314	40	-300	-60	BELOW	-3	150	-100	-100	.05
110	314	40	-300	-60	BELOW	-3	200	-100	-100	.09
110	314	40	-300	-40	BELOW	-3	150	-100	-100	.59
110	314	40	-300	-40	BELOW	-3	150	100	-100	.09
110	314	40	-300	-40	BELOW	-3	200	-100	-100	.38
110	314	40	-300	-40	-6000	-3	150	-100	-100	.78
110	314	40	-300	-40	-6000	-3	200	-100	-100	.17
115	314	40	-300	-40	BELOW	-3	150	-100	-100	.17
115	314	40	-300	-40	BELOW	-3	200	-100	-100	.60
115	314	40	-300	-40	-6000	-6	200	-100	-100	.04
115	314	40	-300	-40	-6000	-3	150	-100	-100	.09
115	314	40	-300	-40	-6000	-3	200	-100	-100	.12

LEFT TURN, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-600	-40	-3000	-6	-100	-100	100	.09
40	314	20	-600	-40	-3000	-6	-100	-100	150	.03
40	314	20	-600	-40	-3000	3	-100	100	-100	.09
60	314	20	-600	-40	-3000	-3	-100	-100	-100	.09
60	314	30	-600	-40	-3000	-3	-100	-100	-100	.09
60	314	30	-600	-40	-3000	3	-100	-100	-100	.04

TABLE LXXVI -Continued

LEFT TURN, DESCENT, 6000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	30	-600	-40	-3000	3	-100	100	-100	.04
70	314	30	-600	-40	-3000	-3	-100	-100	-100	.09
75	314	30	-600	-40	-3000	-3	-100	100	-100	.09
80	314	20	-600	-20	-3000	-3	-250	-100	-100	.36
80	325	20	-600	-20	-3000	-3	-250	-100	-100	.58

LEFT TURN, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-600	-40	-6000	-3	-100	-100	-100	.09
40	314	10	-600	-40	-6000	-3	-100	-100	100	.09
40	314	20	-600	-40	-6000	-3	-100	-100	-100	.17
75	314	20	-600	-20	0	-3	-250	-100	-100	.24
75	325	20	-300	-20	0	-3	-250	-100	-100	.12
80	314	20	-600	-20	0	-3	-250	-100	-100	.49
80	314	20	-300	-20	0	-3	-250	-100	-100	.49
80	325	20	-600	-20	0	-3	-250	-100	-100	.12
80	325	20	-300	-20	0	-3	-250	-100	-100	.12
80	325	30	-300	-80	BELOW	-3	-100	-100	-100	.18
85	314	20	-300	-20	0	-3	-250	-100	-100	.12
85	325	30	-300	-80	BELOW	-3	-100	-100	-100	.31
90	325	30	-300	-80	BELOW	-3	-100	-100	-100	.22
95	325	30	-300	-80	BELOW	-3	-100	-100	-100	.39
100	314	30	-900	-60	-3000	-3	-100	-100	-150	.17
100	314	30	-900	-60	-3000	-3	-100	100	-150	.07

LEFT TURN, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	20	-300	-60	BELOW	-3	-100	-100	-100	.12
[illegible]0	314	20	-300	-60	BELOW	-3	-100	-100	100	.07
60	314	30	-300	-60	BELOW	-3	100	-100	-100	.17
70	314	20	-300	-60	BELOW	-6	-100	-100	100	.09
70	314	30	-300	-60	BELOW	-3	-100	-100	-100	.06
70	325	20	-900	-60	-3000	-3	-100	-100	-100	.13
75	314	30	-300	-60	BELOW	-3	-100	-100	-100	.06
75	325	20	-900	-60	-3000	-3	-100	-100	-100	.04
80	314	2[illegible]	-300	-60	BELOW	-6	-100	-100	100	.04
80	325	[illegible]0	-900	-60	-3000	-3	-100	-100	-100	.09
85	314	[illegible]	-300	-60	BELOW	-6	-100	-100	100	.04
85	325	[illegible]	-900	-60	-3000	-3	-100	-100	-100	.09
85	325		-600	-80	-6000	-3	-100	-100	-100	.22
90	314	20	-300	-60	BELOW	-6	-100	-100	150	.04
90	314	30	-300	-60	-6000	-3	-100	-100	-100	.03
90	314	30	-300	-40	-6000	-3	-100	-100	-100	.09
90	325	20	-900	-60	0	-3	-100	-100	-100	.30
90	325	30	-600	-80	-6000	-3	-100	-100	-100	.22
95	314	30	-300	-60	BELOW	-6	-100	-100	150	.04
95	314	30	-300	-60	BELOW	-3	-100	-100	-100	.17
95	314	30	-300	-40	-6000	-3	-100	-100	-100	.09
95	325	20	-900	-60	-3000	-3	-100	-100	-100	.05
95	325	30	-600	-80	-6000	-3	-100	-100	-100	.04
95	325	30	-600	-80	-6000	-3	100	-100	-100	.14
100	314	40	-300	-60	BELOW	-3	100	-100	-100	.09

TABLE LXXVI - Concluded

LEFT TURN, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	0	-3000		-3	150	-100	-100	.17
BLW	314	30	-300	0	-3000		3	200	-100	-100	.09
BLW	314	30	-300	20	-3000		-3	150	-100	-100	.09
BLW	314	30	-300	20	-3000		3	150	-100	-100	.09
40	314	20	-300	0	-3000		-3	150	-100	-100	.14
60	314	20	-300	0	-3000		-3	100	-100	-100	.16
60	314	20	-300	0	-3000		-3	150	-100	-100	.43
60	314	30	-300	0	-3000		-3	150	-100	-100	.17
70	314	20	-300	0	-3000		-6	150	-100	-100	.09
70	314	20	-300	0	-3000		-3	150	-100	-100	.09
75	314	20	-600	0	-3000		-3	150	-100	-100	.09
80	314	20	-600	0	-3000		-3	100	-100	-100	.22
110	314	30	-1200	-40	-6000		-3	100	-100	-100	.17
110	314	30	-1200	-20	-3000		-3	100	-100	-100	.09
110	314	30	-600	-60	BELOW		-3	-100	-100	-100	.14
115	314	30	-1200	-40	-6000		-3	100	-100	-100	.16
115	314	30	-1200	-20	-3000		-3	100	-100	-100	.09
115	314	30	-600	-60	BELOW		-3	-100	-100	-100	.26
120	314	30	-1200	-40	-6000		-3	100	-100	-100	.17

TABLE LXXVII. TIME FOR RIGHT TURN DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

RIGHT TURN, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	40	-300	-20	-6000		-3	100	-100	-100	.17
BLW	314	40	-300	-20	-6000		-3	150	-100	-100	.29
BLW	314	50	-300	-40	-6000		-9	200	-100	-100	.02
BLW	314	50	-300	-40	-6000		-3	100	-100	-100	.09
BLW	314	50	-300	-40	-6000		-3	200	-100	-100	.07
BLW	314	50	-300	-20	-6000		-3	150	-100	-100	.09
BLW	325	20	-300	0	-3000		-6	-100	-100	-100	.09
BLW	325	20	-300	0	-3000		-3	-100	-100	-100	.28
BLW	325	20	-300	0	-3000		3	-100	-100	-100	.12
BLW	325	30	-300	0	-3000		-6	-100	-100	-100	.09
BLW	325	30	-300	0	-3000		-3	-100	-100	-100	.26
BLW	325	30	-300	0	-3000		3	-100	-100	-100	.17
BLW	325	30	-300	20	-3000		-3	-100	-100	-100	.23
BLW	334	30	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	334	30	-300	-60	-6000		-3	100	-100	-100	.09
BLW	334	40	-300	-60	-6000		-6	-100	-100	-100	.07
BLW	334	40	-300	-60	-6000		-3	-100	-100	-100	.05

RIGHT TURN, ASCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	40	300	-60	-6000		-3	100	-100	-100	.09
BLW	314	40	300	-60	-6000		3	-100	-100	-100	.20

TABLE LXXVII - Continued

RIGHT TURN, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	40	600	-40	-3000		-3	-100	-100	-100	.09
40	314	20	300	-20	0		-3	100	-100	-100	.09
40	314	30	300	-20	0		-3	-100	-100	-100	.09
40	314	40	600	-40	-3000		-3	-100	-100	-100	.09
40	314	40	600	-40	-3000		3	-100	-100	-100	.04
60	314	20	300	-20	0		-6	100	-100	-100	.09
60	314	40	600	-40	-3000		3	-100	-100	-100	.04
60	325	10	-300	-20	0		-3	-100	100	-100	.09
60	325	20	-300	-20	0		-3	-100	100	-100	.52
70	314	20	300	-20	-3000		-6	100	-100	-100	.04
70	314	40	600	-40	-3000		3	-100	-100	-100	.04
70	325	20	-300	-20	0		-3	-100	100	-100	.09
75	314	20	-300	-20	0		-3	-100	100	-100	.14
75	314	20	-300	-20	0		-3	-100	150	-100	.05
75	314	30	-300	-60	-6000		-3	-100	-100	-100	.70
75	314	30	-300	-20	0		-3	-100	100	-100	.09
75	314	30	300	-20	-3000		-6	100	-100	-100	.04
75	314	40	600	-40	-3000		3	-100	-100	-100	.04
75	325	20	-300	-20	-3000		-3	100	100	-100	.05
75	325	30	-300	-20	0		-3	-100	100	-100	.17
80	314	20	-300	0	-3000		-3	-100	100	-100	.09
80	314	30	-300	-60	-6000		-3	-100	-100	-100	.05
80	314	30	-300	-20	-3000		3	100	-100	-100	.04
80	314	30	-300	-20	0		-3	-100	100	-100	.09
80	314	30	300	-20	-3000		-6	-100	-100	-100	.04
80	314	40	600	-40	-3000		-3	-100	-100	-100	.04
80	325	20	-300	-20	-3000		-3	-100	100	-100	.26
80	325	30	-300	-20	0		-3	-100	100	-100	.09
85	314	20	-300	-20	-3000		-6	100	-100	-100	.04
85	314	20	-300	-20	-3000		-3	-100	-100	-100	.09
85	314	20	-300	-20	-3000		-3	100	-100	-100	.09
85	314	30	-300	-20	-3000		3	100	-100	-100	.04
85	314	30	300	-20	-3000		-6	-100	-100	-100	.04
85	314	40	600	-40	-3000		-3	-100	-100	-100	.04
85	325	30	-300	-20	-3000		-3	100	100	-100	.09
90	314	20	-300	-20	-3000		-6	100	-100	-100	.04
90	314	20	-300	-20	-3000		-3	100	100	-100	.09
90	314	30	300	-20	-3000		-6	-100	-100	-100	.04
90	314	40	600	-40	-3000		-3	-100	-100	-100	.02
95	314	30	-300	-20	-3000		-3	-100	-100	-100	.09
95	314	30	-300	-20	-3000		-3	100	-100	-100	.07
95	314	30	300	-20	-3000		-6	100	100	-100	.04
100	314	30	-300	-20	-3000		-3	-100	100	-100	.09
100	314	30	300	-20	-3000		-3	-100	-100	-100	.09
105	314	30	300	-20	-3000		-3	100	-100	-100	.09
110	314	30	300	-20	-3000		-3	100	100	-100	.09

TABLE LXXVII- Continued

RIGHT TURN, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
40	325	40	600	-60	-6000		-3	-100	-100	-150	.09
40	325	40	600	-60	-6000		-3	-100	-100	-100	.27
40	325	40	900	-80	-6000		-6	-100	-100	-100	.07
60	314	30	300	-40	-6000		-3	-100	-100	-100	.09
60	325	20	300	20	0		-3	-100	-100	-100	.14
60	325	20	300	20	0		-3	100	-100	-100	.18
60	325	30	-300	-80	-6000		-3	-100	-100	-100	.14
60	325	30	-300	-80	-6000		-3	-100	100	-100	.18
60	325	40	-300	-80	-6000		3	-100	-100	-100	.04
60	325	40	900	-80	-6000		-3	-100	-100	-100	.09
70	314	30	300	-40	-6000		-3	-100	-100	-100	.04
70	325	20	300	20	0		-3	-100	-100	-100	.07
70	325	40	-300	-80	-6000		3	-100	-100	-100	.04
70	325	40	900	-80	-6000		-6	-100	-100	-100	.04
75	314	30	300	-40	-6000		-3	-100	-100	-100	.17
75	314	30	600	-40	-6000		-3	-100	-100	-100	.09
75	325	20	300	20	0		-3	100	-100	-100	.07
75	325	40	-300	-80	-6000		-3	-100	-100	-100	.09
75	325	40	300	-80	-6000		-3	-100	-100	-150	.09
75	325	40	900	-80	-6000		-6	-100	-100	-100	.04
80	314	30	-300	-40	-6000		-3	-100	-100	-100	.09
80	314	30	300	-40	-6000		-3	-100	-100	-100	.13
80	314	30	600	-40	-6000		-3	-100	-100	-100	.09
80	314	40	600	-40	-6000		-3	-100	-100	-100	.03
80	325	20	300	20	0		-3	100	-100	-100	.07
80	325	40	-300	-80	BELOW		-3	-100	-100	-100	.04
80	325	40	-300	-80	-6000		-3	-100	-100	-150	.09
80	325	40	300	-80	-6000		-3	-100	-100	-150	.09
80	325	40	300	-80	-6000		-3	-100	-100	-100	.18
80	325	40	300	-80	-6000		3	-100	-100	-100	.02
80	325	40	900	-80	-6000		-6	-100	-100	-100	.04
85	314	30	300	-40	-6000		-3	-100	-100	-100	.17
85	314	40	-300	-40	-6000		-3	-100	-100	-100	.04
85	314	40	300	-60	-3000		-3	-100	100	-100	.09
85	325	20	300	20	0		-3	100	-100	-100	.03
85	325	40	-300	-80	BELOW		-3	100	-100	-100	.18
85	325	40	300	-80	-6000		-3	-100	-100	-150	.09
85	325	40	300	-80	-6000		-3	-100	-100	-100	.14
85	325	40	300	-80	-6000		-3	100	-100	-100	.18
90	314	40	-300	-40	-6000		-3	-100	-100	-100	.04
90	314	40	300	-60	-3000		-3	-100	100	-100	.38
90	325	20	300	20	0		-3	-100	-100	-100	.03
90	325	20	300	20	0		-3	100	-100	-100	.07
90	325	30	-300	-80	-6000		-3	-100	-100	-100	.52
90	325	40	-300	-80	BELOW		-3	100	-100	-100	.18
90	325	40	300	-80	-6000		-3	-100	-100	-100	.09
90	325	40	300	-80	-6000		-3	100	-100	-100	.05
90	325	40	900	-80	-6000		-6	-100	-100	-100	.04
90	325	40	900	-80	-6000		-3	100	-100	-100	.04
95	314	40	-300	-80	-6000		-3	100	-100	-100	.18
95	314	40	-300	-40	-6000		-3	-100	-100	-100	.16
95	314	40	300	-60	-3000		-3	-100	100	-100	.09

TABLE LXXVII - Continued

RIGHT TURN, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	30	300	-20	-3000	-3	150	-100	-100	.17
60	314	30	300	-20	-3000	-3	150	-100	-100	.17
60	314	30	300	20	-3000	-3	150	-100	-100	.17
60	325	20	300	0	-3000	-3	-100	-100	-100	.17
60	325	20	300	0	-3000	-3	100	-100	-100	.07
60	325	30	300	0	-3000	-3	100	-100	-100	.08
60	325	40	600	-40	-6000	-3	150	-100	-100	.13
70	314	30	300	-20	-3000	-3	150	-100	-100	.08
70	314	30	300	0	-3000	-3	150	-100	-100	.09
70	314	30	300	20	-3000	-3	150	-100	-100	.17
70	314	30	300	20	0	-3	150	-100	-100	.09
70	325	20	300	0	-3000	-3	100	-100	-100	.08
70	325	40	600	-40	-6000	-3	150	-100	-100	.08
75	314	30	-300	0	-3000	-3	-100	100	-100	.09
75	314	30	-300	0	-3000	-3	100	100	-100	.09
75	314	30	300	0	-3000	-3	-100	100	-100	.07
75	314	30	300	0	-3000	-3	100	100	-100	.09
75	314	30	300	0	-3000	-3	150	-100	-100	.05
75	314	30	300	20	0	-3	100	-100	-100	.09
75	314	30	300	20	0	-3	100	100	-100	.07
75	314	30	300	20	0	-3	150	-100	-100	.09
75	325	40	600	-40	-6000	-3	100	-100	-100	.09
75	325	40	600	-40	-6000	-3	150	-100	-100	.17
80	314	30	-300	0	-3000	-3	100	100	-100	.07
80	314	30	300	0	-3000	-3	100	100	-100	.09
80	314	30	300	20	0	-3	150	100	-100	.26

RIGHT TURN, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	0	-3000	3	-100	-100	-100	.09
40	314	10	-300	0	-3000	-6	-100	-100	-100	.09
40	314	20	-300	0	-3000	-3	-100	-100	-100	.17
40	314	20	-300	0	-3000	-3	100	-100	-100	.28
40	314	20	-300	0	-3000	3	100	-100	-100	.09
60	314	20	-300	0	-3000	-6	-100	-100	-100	.09
60	314	20	-300	0	-3000	-3	-100	-100	-100	.09
60	314	30	-300	0	-3000	-3	100	-100	-100	.03
70	314	20	-300	0	-3000	-6	-100	-100	-100	.04
70	314	20	-300	0	-3000	-3	-100	-100	-100	.09
75	314	20	-300	-20	-3000	-3	-200	-100	-100	.61
75	314	20	-300	0	-3000	-6	100	-100	-100	.04
75	314	20	-300	0	-3000	-3	-100	-100	-100	.09
75	314	20	-300	0	-3000	-3	100	-100	-100	.21
75	314	20	-300	0	-3000	3	100	-100	-100	.04
75	325	20	-300	-20	-3000	-3	-200	-100	-100	.32
80	314	20	-300	-20	-3000	-3	-250	-100	-100	.36
80	314	20	-300	-20	-3000	-3	-200	-100	-100	.61
80	314	20	-300	0	-3000	-6	100	-100	-100	.04
80	314	20	-300	0	-3000	-3	-100	-100	-100	.09
80	314	20	-300	0	-3000	-3	100	-100	-100	.07
80	314	20	-300	0	-3000	3	100	-100	-100	.04
80	325	20	-300	-20	-3000	-3	-250	-100	-100	.24
80	325	20	-300	-20	-3000	-3	-200	-100	-100	.24

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 6000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
85	314	20	-300	0	-3000	-6	100	-100	-100	.04
85	314	20	-300	0	-3000	-3	100	-100	-100	.21
85	325	20	-300	-20	-3000	-3	-250	-100	-100	.12
85	325	20	-300	-20	-3000	-3	-200	-100	-100	.12
90	314	20	-300	0	-3000	-3	-100	-100	-100	.03
90	314	20	-300	0	-3000	-3	100	-100	-100	.07
95	314	20	-300	0	-3000	-3	100	-100	-100	.24
100	314	20	-300	0	-3000	-3	100	-100	-100	.04
100	314	30	-300	0	-3000	-3	100	-100	-100	.09
105	314	20	-300	0	-3000	-3	100	-100	-100	.04

RIGHT TURN, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	0	3000	-3	-100	-100	-100	.09
40	314	20	-300	-60	-6000	-3	-100	-100	-100	.77
40	314	20	-300	0	3000	-3	-100	-100	-100	.18
40	314	20	300	0	3000	-3	-100	-100	-100	.37
40	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
40	314	30	-300	-60	-6000	3	-100	-100	-100	.09
40	314	30	-300	0	3000	-3	-100	-100	-100	.09
40	314	30	-300	0	3000	3	-100	-100	-100	.09
40	314	30	300	-60	-6000	-3	-100	-100	-100	.18
40	314	30	300	-60	-6000	3	-100	-100	-100	.09
60	314	20	-300	-60	-6000	-6	-100	-100	-100	.09
60	314	20	-300	-60	-6000	-3	-100	-100	-100	.26
60	314	20	-300	-20	0	-3	-150	-100	-100	.46
60	314	20	300	0	3000	-3	-100	-100	-100	.27
60	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
60	314	30	-300	-60	-6000	3	-100	-100	-100	.09
60	314	30	-300	0	3000	3	-100	-100	-100	.05
60	314	30	300	-60	-6000	-3	-100	-100	-100	.45
60	325	20	300	20	0	-3	100	-100	-100	.15
70	314	20	-300	-60	-6000	-3	-100	-100	-100	.09
70	314	20	-300	-20	0	-3	-150	-100	-100	.06
70	314	30	-300	-60	-6000	-3	-100	-100	-100	.23
70	325	10	-300	20	0	-3	-100	-100	150	.08
70	325	20	-300	20	0	-3	-100	-100	100	.46
70	325	20	-300	20	0	-3	-100	-100	150	.15
70	325	20	-300	20	0	-3	100	-100	100	.08
70	325	20	300	20	0	-3	-100	-100	-100	.22
70	325	20	300	20	0	-3	100	-100	-100	.15
70	325	30	-300	-100	BELOW	-3	-100	-100	-100	.02
75	314	20	-300	-20	0	-3	-150	-100	-100	.06
75	314	20	-300	20	0	-3	-100	-100	-100	.08
75	314	30	-300	-60	-6000	-3	-100	-100	-100	.10
75	314	30	-300	-60	-3000	-3	-100	100	-150	.05
75	325	10	-300	20	0	-3	-100	-100	100	.08
75	325	10	-300	20	0	-3	-100	-100	150	.23
75	325	20	-300	20	0	-3	-100	-100	100	.23
75	325	20	-300	20	0	-3	-100	-100	150	.08
75	325	20	-300	20	0	-3	100	-100	150	.09
75	325	30	-300	-100	BELOW	-3	-100	-100	-100	.45

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	20	-300	-20	0	-3	-200	-100	-100	.12
80	314	20	-300	0	-3000	-3	100	-100	-100	.04
80	314	20	-300	0	-3000	-3	150	-100	-100	.08
80	314	30	-300	-60	-3000	-3	-100	100	-150	.26
80	314	30	-300	-60	-3000	-3	-100	150	-200	.09
80	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
80	314	30	-300	-20	-3000	3	100	-100	-100	.07
80	325	10	-300	20	0	-3	-100	-100	100	.08
80	325	20	-300	-20	-3000	3	-100	-100	-100	.04
80	325	20	-300	-20	-3000	3	100	-100	-100	.03
80	325	20	-300	20	0	-3	-100	-100	100	.08
80	325	30	-300	-100	BELOW	-3	-100	-100	-100	.20
80	325	30	-300	-80	BELOW	-3	-100	-100	-100	.45
80	325	30	-300	-60	-3000	-3	-100	100	-150	.07
85	314	20	-300	-20	-3000	-3	100	-100	-100	.08
85	314	20	-300	-20	0	-3	-200	-100	-100	.12
85	314	20	-300	-20	0	-3	-150	-100	-100	.12
85	314	30	-300	-60	-3000	-3	-100	100	-200	.03
85	314	30	-300	-60	-3000	-3	-100	100	-150	.04
85	314	30	-300	-40	-3000	-3	-100	-100	-100	.13
85	314	30	-300	0	-3000	-3	100	-100	-100	.04
85	325	20	-300	-20	-3000	-3	-100	-100	-100	.09
85	325	20	-300	-20	-3000	-3	-100	100	-100	.14
85	325	20	-300	-20	-3000	3	-100	-100	-100	.07
85	325	30	-300	-80	BELOW	-3	-100	-100	-100	.07
85	325	30	-300	-80	BELOW	-3	100	-100	-100	.09
85	325	30	-300	20	0	-3	-100	-100	-100	.15
90	314	20	-300	-20	-3000	-3	-100	-100	-100	.17
90	314	20	-300	-20	-3000	-3	-100	100	-100	.05
90	314	20	-300	-20	-3000	-3	100	-100	-100	.08
90	314	20	-300	-20	-3000	3	100	-100	-100	.07
90	314	20	-300	-20	0	-3	-150	-100	-100	.24
90	314	20	-300	0	-3000	-6	200	-100	-100	.04
90	314	20	-300	0	-3000	-3	150	-100	-100	.08
90	314	30	-300	-60	-3000	-3	-100	100	-200	.34
90	314	30	-300	-60	-3000	-3	-100	100	-150	.04
90	314	30	-300	-60	-3000	-3	-100	150	-200	.09
90	314	30	-300	-60	0	-3	-100	100	-200	.14
90	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
90	314	30	-300	20	0	-3	-100	-100	-100	.06
90	314	30	300	-60	-3000	-3	-100	100	-200	.09
90	314	30	300	-60	0	-3	-100	100	-200	.03
90	325	20	-300	-20	-3000	-3	-100	-100	-100	.28
90	325	20	-300	-20	-3000	-3	100	100	-100	.03
90	325	30	-300	20	0	-3	-100	-100	-100	.15
90	325	30	-300	20	0	-3	100	-100	-100	.08
90	325	40	-300	-100	BELOW	-3	100	-100	-100	.11
95	314	20	-300	-20	-3000	-3	100	-100	-100	.22
95	314	20	-300	0	-3000	-6	200	-100	-100	.04
95	314	20	-300	0	-3000	-3	100	-100	-100	.17
95	314	30	-300	-80	-6000	-3	-100	-100	-100	.18
95	314	30	-300	-60	-3000	-3	-100	-100	-200	.22
95	314	30	-300	-60	-3000	-3	-100	-100	-100	.09
95	314	30	-300	-60	-3000	-3	-100	100	-200	.52

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	30	-300	-60	-3000	-3	-100	100	-150	.17
95	314	30	-300	-60	0	-3	-100	100	-200	.17
95	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
95	314	30	300	-60	-3000	-3	-100	100	-200	.17
95	314	40	-300	-60	-3000	-3	-100	-100	-150	.09
95	314	40	-300	-60	-3000	-3	-100	100	-200	.26
95	314	40	-300	-40	-3000	-3	-100	-100	-100	.04
95	325	20	-300	-20	-3000	-6	-100	-100	-100	.10
95	325	20	-300	-20	-3000	-6	100	-100	-100	.03
95	325	30	-300	-80	BELOW	-3	100	-100	-100	.12
95	325	30	-300	-80	-6000	-3	-100	-100	-100	.27
100	314	30	-300	-80	BELOW	-3	100	-100	-100	.09
100	314	30	-300	-80	BELOW	-3	150	-100	-100	.09
100	314	30	-300	-80	-6000	-3	-100	-100	-100	.09
100	314	30	-300	-80	-6000	-3	100	-100	-100	.04
100	314	30	-300	-60	-3000	-3	-100	-100	-200	.09
100	314	30	-300	-60	-3000	-3	-100	-100	-100	.21
100	314	30	-300	-40	-3000	-3	-100	-100	-100	.18
100	314	30	-300	-20	-3000	-3	100	-100	-100	.13
100	314	30	-300	0	-3000	-3	100	-100	-100	.08
100	314	40	-300	-60	-3000	-3	-100	-100	-200	.14
100	314	40	-300	-60	-3000	-3	-100	-100	-150	.46
100	314	40	-300	-60	-3000	-3	-100	100	-200	.09
100	314	40	-300	-40	-3000	-3	-100	-100	-100	.09
100	325	30	-300	-80	BELOW	-3	100	-100	-100	.09
100	325	30	-300	-80	BELOW	-3	150	-100	-100	.09
100	325	30	-300	-80	-6000	-3	-100	-100	-100	.09
105	314	30	-300	-20	-3000	-3	100	-100	-100	.23
105	325	30	-300	-20	-3000	-6	-100	-100	-100	.10
105	325	30	-300	-20	-3000	-3	100	-100	-100	.13
110	314	30	-300	-20	-3000	-3	100	-100	-150	.16
110	314	30	-300	-20	-3000	-3	100	-100	-100	.23
110	325	30	-300	-20	-3000	-3	100	-100	-100	.07

RIGHT TURN, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-600	-40	-6000	6	-100	-100	-100	.03
40	314	20	-300	-60	BELOW	-3	-100	-100	-100	.09
40	314	20	-300	20	0	-3	100	-100	-100	.59
40	314	20	-300	20	0	-3	150	-100	-100	.08
40	314	30	-300	-60	BELOW	-3	-100	-100	-100	.34
40	314	30	-300	-60	BELOW	-3	100	-100	-100	.07
40	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
40	325	20	-600	-80	-6000	-3	-100	-100	-100	.18
40	325	30	-600	-80	-6000	-3	-100	-100	-100	.52
40	325	30	300	-80	BELOW	-6	-100	-100	-100	.02
40	325	30	300	-80	BELOW	-3	-100	-100	-100	.09
60	314	20	-300	-60	BELOW	-6	-100	-100	-100	.09
60	314	20	-300	-40	-6000	-3	100	-100	-100	.09
60	314	20	-300	0	0	-3	100	-100	-100	.46
60	314	30	-600	-40	BELOW	-3	100	-100	-100	.09
60	314	30	-600	-40	-6000	6	-100	-100	-100	.03
60	314	30	-300	-60	BELOW	-3	100	-100	-100	.05

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	30	-300	-40	-6000	-3	100	-100	-100	.10
60	314	30	-300	-40	-6000	-3	150	-100	-100	.50
60	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
60	314	30	-300	-40	-3000	3	-100	-100	-100	.04
60	314	40	-300	-60	BELOW	-3	100	-100	-100	.09
60	325	10	-600	-40	-6000	-6	-100	-100	200	.05
60	325	20	-600	-80	-3000	-3	-100	-100	-100	.18
60	325	20	-300	20	0	-3	100	-100	-100	.06
60	325	20	-300	40	0	-3	100	-100	-100	.30
60	325	30	-600	-80	-6000	-6	-100	-100	-100	.09
60	325	30	-600	-80	-3000	-3	-100	-100	-100	.14
60	325	30	300	-80	BELOW	-3	-100	-100	-100	.23
70	314	20	-300	-60	BELOW	-6	-100	-100	-100	.04
70	314	20	-300	-40	-6000	-3	100	-100	-100	.09
70	314	20	-300	0	-3000	-3	-100	-100	-100	.08
70	314	20	-300	0	-3000	-3	100	-100	-100	.03
70	314	20	-300	0	0	-3	100	-100	-100	.03
70	314	30	-600	-40	BELOW	-3	100	-100	-100	.26
70	314	30	-600	-40	-6000	3	-100	-100	-100	.04
70	314	30	-300	-60	-3000	-3	-100	-100	-100	.09
70	314	30	-300	-40	BELOW	-3	100	-100	-100	.38
70	314	30	-300	-40	-6000	-3	100	-100	-100	.09
70	314	30	-300	-40	-6000	-3	150	-100	-100	.09
70	325	20	-600	-80	-3000	-3	-100	100	-100	.18
70	325	20	-300	20	0	-3	-100	-100	-100	.07
70	325	20	-300	20	0	-3	100	-100	-100	.50
70	325	20	-300	40	0	-3	100	-100	-100	.14
75	314	20	-300	-40	-6000	-3	100	-100	-100	.09
75	314	20	-300	0	-3000	-3	-100	-100	-100	.76
75	314	20	-300	0	-3000	-3	100	-100	-100	.08
75	314	20	-300	0	0	-3	-100	-100	-100	.42
75	314	20	-300	0	0	-3	100	-100	-100	.41
75	314	20	-300	0	0	-3	150	-100	-100	.08
75	314	30	-600	-40	-6000	3	-100	-100	-100	.04
75	314	30	-300	-60	BELOW	-3	100	100	-100	.03
75	314	30	-300	-40	-6000	-3	150	-100	-100	.17
75	314	30	-300	-40	-3000	3	-100	-100	-100	.04
75	314	40	-300	-40	BELOW	-3	100	-100	-100	.09
75	325	20	-600	-40	-6000	-9	-100	-100	100	.04
75	325	20	-300	20	0	-3	-100	-100	-100	.07
75	325	20	-300	20	0	-3	100	-100	-100	.35
75	325	20	-300	20	0	-3	100	-100	100	.07
75	325	20	-300	40	0	-3	100	-100	-100	.07
75	325	30	-300	-80	-3000	-3	-100	-100	-100	.04
75	325	30	-300	-60	-3000	3	-100	-100	-100	.04
75	325	30	300	-80	-6000	-3	-100	-100	-100	.27
80	314	20	-300	-60	BELOW	-3	-100	-100	-100	.09
80	314	20	-300	0	-3000	-3	-100	-100	-100	.08
80	314	20	-300	0	-3000	-3	150	-100	-100	.17
80	314	20	-300	0	0	-3	-100	-100	-100	.08
80	314	20	-300	0	0	-3	100	-100	-100	.42
80	314	30	-300	-60	BELOW	-6	-100	-100	-100	.04
80	314	30	-300	-40	-6000	-3	100	-100	-100	.33
80	314	30	-300	-40	-6000	-3	150	-100	-100	.22

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	30	-300	-40	-3000	-3	-100	-100	-100	.05
80	314	30	-300	0	-3000	-3	150	-100	-100	.09
80	314	40	-300	-60	BELOW	-3	-100	100	-100	.09
80	314	40	-300	-40	BELOW	-3	100	100	-100	.09
80	325	20	-300	-20	0	-3	-100	100	-100	.09
80	325	30	-300	-80	-6000	-3	-100	-100	-100	.31
80	325	30	-300	-80	-3000	-6	-100	-100	-100	.03
80	325	30	-300	-60	-3000	3	-100	-100	-100	.04
80	325	30	300	-80	-6000	-3	-100	-100	-100	.07
80	325	40	300	-80	-6000	-3	-100	-100	-100	.02
85	314	20	-600	-40	-6000	-9	-100	-100	-100	.04
85	314	20	-300	-60	-6000	-3	-100	-100	-100	.09
85	314	20	-300	-20	0	-3	-100	100	-100	.09
85	314	20	-300	0	-3000	-3	150	-100	-100	.14
85	314	20	-300	0	0	-3	100	-100	-100	.17
85	314	30	-300	-60	BELOW	-3	-100	-100	-100	.09
85	314	30	-300	-60	BELOW	-3	-100	100	-100	.09
85	314	30	-300	-60	BELOW	-3	100	100	-100	.09
85	314	30	-300	-40	-6000	-3	-100	-100	-100	.09
85	314	30	-300	-40	-6000	-3	150	-100	-100	.04
85	314	30	-300	0	-3000	-3	150	-100	-100	.38
85	314	40	-300	-60	BELOW	-3	-100	100	-100	.26
85	314	40	-300	-60	BELOW	-3	100	100	-100	.17
85	314	40	-300	-40	BELOW	-3	-100	100	-100	.09
85	314	40	-300	-40	BELOW	-3	100	100	-100	.09
85	325	20	-300	-20	0	-3	-100	100	-100	.31
85	325	30	-300	-80	-6000	-3	-100	-100	-100	.57
85	325	30	-300	-80	-6000	-3	100	-100	-100	.09
85	325	30	-300	-80	-3000	-6	-100	-100	-100	.03
85	325	30	-300	-80	-3000	-3	-100	-100	-100	.11
85	325	30	-300	-60	-3000	-3	-100	150	-150	.02
90	314	30	-300	-60	BELOW	-3	-100	100	-100	.09
90	314	30	-300	-60	BELOW	-3	100	100	-100	.09
90	314	30	-300	-40	-6000	-3	-100	-100	-100	.99
90	314	40	-300	-80	-6000	-3	-100	-100	-100	.02
90	314	40	-300	-60	BELOW	-3	-100	100	-100	.17
90	314	40	-300	-60	BELOW	-3	100	100	-100	.12
90	314	40	-300	-40	BELOW	-3	100	100	-100	.14
90	325	30	-300	-80	-6000	-3	-100	-100	-100	.09
90	325	30	-300	-80	-6000	-3	100	-100	-100	.18
90	325	30	-300	-80	-3000	-6	-100	-100	-100	.04
90	325	30	-300	-80	-3000	-3	-100	-100	-150	.09
90	325	30	-300	-80	-3000	-3	-100	-100	-100	.36
90	325	30	-300	-60	-3000	-3	-100	-100	-100	.09
90	325	30	-300	-60	-3000	-3	-100	150	-150	.09
90	325	40	-300	-80	-6000	-3	-100	-100	-100	.14
95	314	30	-300	-60	BELOW	-3	-100	100	-100	.09
95	314	30	-300	-40	-6000	-3	-100	-100	-100	1.21
95	314	30	-300	-40	-6000	-3	-100	-100	100	.09
95	314	40	-300	-60	BELOW	-3	100	100	-100	.09
95	314	40	-300	-60	-3000	-3	-100	-100	-100	.15
95	314	40	-300	-40	-6000	-3	-100	-100	-100	.09
95	314	40	-300	-40	-6000	3	-100	-100	-100	.02
95	325	30	-300	-80	-3000	-6	-100	-100	-100	.04
95	325	30	-300	-60	-3000	-3	-100	100	-150	.09

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	30	-300	-60	-3000	-3	-100	150	-150	.17
100	314	30	-900	-40	-6000	-3	-100	-100	-100	.04
100	314	30	-300	-40	-6000	-3	-100	-100	-100	.09
100	314	40	-300	-60	-3000	-3	-100	-100	-100	.46
100	325	30	-300	20	0	-3	-100	-100	-100	.14
105	314	30	-900	-40	-6000	-3	-100	-100	100	.04
105	314	40	-900	-40	-6000	-3	-100	-100	-100	.09
105	325	30	-300	20	0	-3	-100	-100	-100	.07
105	325	30	-300	20	0	-3	100	-100	-100	.51
95	314	30	-600	-20	-3000	-3				.17
100	314	30	-600	-20	-3000	-3				.09
105	314	30	-600	-20	-3000	-3				.09

RIGHT TURN, LEVEL FLIGHT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-300	0	-3000	-3	-100	-100	-100	.09
40	314	20	-300	0	-3000	-3	100	-100	-100	.26
40	314	30	-300	0	-3000	-3	100	-100	-100	.03
40	325	20	-300	0	-3000	-9	-100	-100	100	.03
40	325	20	-300	0	-3000	-3	-100	-100	-100	.26
40	325	20	-300	0	-3000	-3	100	-100	-100	.26
60	314	20	-300	0	-3000	-3	-100	-100	-100	.25
60	314	20	-300	0	-3000	-3	100	-100	-100	.14
60	314	20	-300	0	-3000	-3	150	-100	-100	.26
60	314	30	-300	0	-3000	-3	100	-100	-100	.09
60	314	30	-300	0	-3000	-3	150	-100	-100	.17
70	314	20	-300	0	-3000	-6	150	-100	-100	.05
70	314	20	-300	0	-3000	-3	-100	-100	-100	.42
70	314	20	-300	0	-3000	-3	100	-100	-100	.03
70	314	20	-300	0	-3000	-3	150	-100	-100	.22
70	314	30	-300	0	-3000	-3	150	-100	-100	.17
70	314	30	-300	0	-3000	-3	200	-100	-100	.09
75	314	20	-300	0	-3000	-3	-100	-100	-100	.25
75	314	20	-300	0	-3000	-3	100	-100	-100	.17
75	314	20	-300	0	-3000	-3	100	100	-100	.09
75	314	20	-300	0	-3000	-3	150	-100	-100	.43
75	314	20	-300	0	-3000	-3	200	-100	-100	.07
75	314	30	-300	0	-3000	-3	150	-100	-100	.85
75	325	30	-300	-80	BELOW	-3	-100	-100	-100	.18
80	314	20	-300	0	-3000	-3	-100	-100	-100	.17
80	314	20	-300	0	-3000	-3	-100	100	-100	.05
80	314	20	-300	0	-3000	-3	100	100	-100	.09
80	314	20	-300	0	-3000	-3	150	-100	-100	.17
80	314	30	-300	0	-3000	-3	150	-100	-100	.35
80	325	30	-300	-80	BELOW	-3	100	-100	-100	.18
85	314	30	-300	0	-3000	-3	150	-100	-100	.09
95	314	30	-300	-40	-6000	-3	100	-100	-100	.09
95	314	30	-300	-40	-3000	-3	-100	100	-100	.09
100	314	30	-300	-40	-6000	-3	100	-100	-100	.22
100	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
100	314	30	-300	-40	-3000	-3	-100	100	-100	.28
100	314	40	-300	-40	BELOW	-3	150	-100	-100	.09
100	314	40	-300	-40	-6000	-3	150	100	-100	.14
105	314	30	-300	-40	-3000	-3	-100	100	-150	.09

TABLE LXXVII - Continued

RIGHT TURN, LEVEL FLIGHT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
105	314	40	-300	-60	BELOW	-3	150	-100	-100	.09
105	314	40	-300	-60	BELOW	-3	200	-100	-100	.09
105	314	40	-300	-40	BELOW	-3	150	-100	-100	.43
105	314	40	-300	-40	BELOW	-3	150	100	-100	.09
105	314	40	-300	-40	BELOW	-3	200	-100	-100	.13
110	314	40	-300	-40	BELOW	-3	150	-100	-100	.34
110	314	40	-300	-40	BELOW	-3	200	-100	-100	1.01
115	314	40	-300	-40	BELOW	-3	200	-100	-100	.22
115	314	40	-300	-40	-6000	-3	150	-100	-100	.09
115	314	40	-300	-40	-6000	-3	200	-100	-100	.14
120	314	40	-300	-40	-6000	-3	200	-100	-100	.17

RIGHT TURN, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-900	-40	-3000	-3	-100	100	100	.10
60	314	20	-900	-80	-6000	-3	-100	-100	-100	.09
60	314	20	-900	-40	-3000	-3	-100	100	-100	.09
60	314	20	-900	-40	-3000	3	-100	100	-100	.04
70	314	20	-900	-80	-6000	-3	-100	-100	-100	.09
75	314	20	-900	-80	-6000	-3	-100	-100	-100	.09
75	314	20	-900	-80	-6000	-3	-100	100	-100	.09
75	314	30	-900	-40	-3000	3	-100	100	-100	.04
80	314	20	-600	-20	-3000	-3	-250	-100	-100	.49
80	314	20	-600	-20	-3000	-3	-200	-100	-100	.12
80	314	30	-900	-80	-6000	-3	-100	100	-100	.09
80	314	30	-900	-40	-3000	-3	-100	100	-100	.04
80	325	10	-600	-20	0	-3	-250	-100	-100	.12
80	325	20	-600	-20	-3000	-3	-250	-100	-100	.24
85	314	40	-900	-40	-3000	-3	-100	100	-100	.04
90	314	40	-900	-40	-3000	-3	-100	100	-100	.05

RIGHT TURN, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000	-9	-100	-100	-100	.02
BLW	314	20	-300	-60	-6000	-6	-100	-100	-100	.09
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.04
40	314	10	-600	-80	-6000	-3	-100	-100	100	.18
40	314	20	-600	-80	-6000	-3	-100	-100	-100	.33
40	314	20	-300	-60	-6000	-6	-100	-100	-100	.07
60	314	10	-600	-20	-3000	-3	-100	-100	150	.05
60	314	20	-600	-80	-6000	-3	-100	-100	-100	.09
70	314	10	-600	-20	-3000	-6	100	-100	150	.04
70	314	20	-600	-80	-6000	-3	-100	-100	-100	.09
75	314	10	-600	-20	-3000	-6	100	-100	150	.04
80	314	10	-1500	-20	0	-3	-100	-100	100	.09
80	314	10	-1200	0	3000	-3	-100	-100	-100	.27
80	314	10	-600	-20	-3000	-6	100	-100	100	.04
80	314	20	-1500	0	0	-3	-100	-100	-100	.12
80	314	20	-600	-20	-3000	-3	100	-100	100	.09
80	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
80	314	30	-300	-40	-3000	-3	-100	100	-100	.04

TABLE LXXVII - Continued

RIGHT TURN, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
85	314	10	-1500	-20	-3000	-3	-100	-100	100	.09
85	314	10	-1500	-20	-3000	-3	100	-100	150	.09
85	314	10	-1200	0	3000	-3	-100	-100	-100	.21
85	314	10	-600	-20	-3000	-6	-100	-100	100	.04
85	314	20	-1500	-20	-3000	-3	100	-100	-100	.09
85	314	20	-1500	-20	-3000	12	100	-100	100	.02
85	314	20	-1500	0	0	-3	-100	-100	-100	.09
85	314	20	-600	-20	-3000	-3	100	-100	-100	.04
85	314	30	-300	-40	-3000	-3	-100	100	-100	.04
85	314	40	-300	-40	-3000	-3	-100	-100	-100	.04
90	314	10	-1500	-20	-3000	-3	-100	-100	100	.09
90	314	20	-1200	0	3000	-6	-100	-100	-100	.04
90	314	20	-600	-20	-3000	-3	100	-100	-100	.04
90	314	30	-300	-40	-3000	-3	-100	100	-100	.13
90	314	40	-300	-40	-3000	-3	-100	-100	-100	.09
90	325	10	-1800	0	3000	-3	-100	-100	100	.18
95	314	10	-1800	0	3000	-3	-100	100	-100	.09
95	314	20	-1200	0	3000	-6	-100	-100	-100	.04
95	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
95	314	30	-300	-40	-3000	-3	-100	100	-100	.09
95	314	40	-300	-40	-3000	-3	-100	-100	-100	.03
95	325	10	-1800	0	3000	-3	-100	-100	-100	.09
95	325	10	-1800	0	3000	-3	-100	-100	100	.09

RIGHT TURN, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	0	-3000	-9	100	-100	150	.02
40	314	20	-300	0	-3000	-6	100	-100	100	.08
40	314	20	-300	0	-3000	-3	100	-100	-100	.17
40	314	20	-300	0	-3000	-3	100	-100	100	.25
40	314	20	-300	0	-3000	-3	150	-100	100	.08
60	314	20	-300	-20	-3000	-3	100	-100	-100	.12
70	314	20	-300	-20	-3000	-3	100	-100	-100	.08
70	325	10	-900	0	0	-3	-100	-100	150	.08
75	314	10	-900	0	0	-3	-100	-100	-100	.15
75	314	20	-300	-20	-3000	-3	100	-100	-100	.17
75	314	20	-300	-20	-3000	-3	150	-100	-100	.08
75	325	10	-900	0	0	-3	-100	-100	150	.17
75	325	30	-600	-80	-6000	3	-100	-100	-100	.04
80	314	10	-900	0	0	-3	-100	-100	-100	.25
80	314	30	-300	0	-3000	-3	150	-100	-100	.07
80	325	10	-1500	-80	-3000	-3	-100	-100	-100	.09
80	325	30	-600	-80	-6000	-3	-100	-100	-100	.05
80	325	30	-600	-80	-6000	3	-100	-100	-100	.04
85	325	20	-1500	-80	-6000	-3	-100	-100	-100	.09
85	325	20	-1500	-80	-3000	-3	-100	-100	-100	.09
85	325	30	-600	-80	-6000	-3	-100	-100	-100	.15
85	325	30	-600	-80	-6000	3	-100	-100	-100	.05
90	325	20	-1500	-80	-6000	-3	-100	-100	-100	.18
90	325	30	-1200	-80	-6000	-3	-100	-100	-100	.05
90	325	30	-600	-80	-6000	-3	-100	-100	-100	.13
90	325	40	-600	-80	-6000	-3	-100	-100	-100	.11
95	325	20	-1500	-80	-6000	-3	-100	-100	-100	.18
95	325	30	-1200	-80	-6000	-3	-100	-100	-100	.36
95	325	30	-600	-80	-6000	-3	-100	-100	-100	.09

TABLE LXXVII - Concluded

RIGHT TURN, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	10	-600	20	-3000	-6	150	-100	150	.05
40	325	10	-600	20	0	-6	150	-100	150	.09
40	325	20	-300	0	-3000	-3	-100	-100	-100	.41
40	325	20	-300	0	-3000	-3	100	-100	-100	.09
60	314	10	-600	20	0	-3	100	-100	150	.09
60	314	20	-300	0	-3000	-3	150	-100	-100	.09
60	325	10	-600	20	0	-3	150	-100	150	.09
70	314	10	-600	20	0	-3	150	-100	100	.17
70	314	20	-600	20	0	-3	150	-100	100	.09
70	314	20	-300	0	-3000	-3	150	-100	-100	.26
75	314	20	-600	0	-3000	-3	100	-100	-100	.17
75	314	20	-300	0	-3000	-3	150	-100	-100	.09
80	314	20	-600	0	-3000	-3	150	-100	-100	.16
80	314	20	-300	0	-3000	-3	150	-100	-100	.43
80	314	30	-300	0	-3000	-3	100	-100	-100	.09
85	314	20	-300	0	-3000	-3	150	-100	-100	.09
85	314	30	-300	0	-3000	-3	150	-100	-100	.07
95	314	30	-600	-40	-6000	-3	100	-100	-100	.03
95	314	40	-300	-40	-6000	-3	150	-100	-100	.09
100	314	20	-900	-40	-6000	-3	-100	-100	-100	.17
100	314	20	-900	-40	-6000	-3	100	-100	-100	.67
100	314	30	-600	-40	-6000	-3	-100	-100	-100	.09
100	314	30	-600	-40	-6000	-3	100	-100	-100	.09
100	314	40	-300	-40	BELOW	-3	150	-100	-100	.09
100	314	40	-300	-40	BELOW	3	150	100	-100	.04
100	314	40	-300	-40	-6000	-3	150	100	-100	.09
105	314	20	-2100	-40	-6000	-3	100	-100	-100	.09
105	314	40	-300	-40	BELOW	3	150	-100	-100	.04
105	314	40	-300	-40	-6000	-3	150	100	-100	.17
110	314	20	-2100	-40	-6000	-3	100	-100	100	.09
110	314	20	-2100	-40	-6000	-3	150	-100	-100	.03
110	314	40	-300	-40	-6000	-3	150	-100	-100	.26
110	314	40	-300	-40	-6000	-3	150	100	-100	.17

TABLE LXXVIII. TIME FOR COLLECTIVE PUSHOVER DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

COLLECTIVE PUSHOVER, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	40	-300	-20	-6000	3	150	-100	-100	.09

COLLECTIVE PUSHOVER, ASCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	40	-300	-40	-3000	3	-100	-100	-100	.05
60	314	40	-300	-40	-3000	3	-100	100	-100	.05
70	314	30	-300	-40	-3000	-3	-100	100	-100	.14
80	314	20	300	-20	-3000	-3	-100	-100	-100	.08
80	314	40	-300	-80	-6000	-3	-100	100	-100	.20
85	314	20	300	-20	-3000	-3	-100	-100	-100	.08
85	314	30	-300	-80	-6000	-3	-100	-100	-100	.09
85	314	30	300	-20	-3000	-3	-100	-100	-100	.14

COLLECTIVE PUSHOVER, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	300	-20	0	-3	-100	-100	-100	.19
40	314	20	300	-20	0	-3	100	-100	-100	.17
60	314	20	-300	-80	-6000	-3	-100	-100	-100	.27
60	314	30	-300	-60	-6000	-3	-100	-100	-100	.13
70	314	20	-300	-20	0	3	-100	100	-100	.02
70	314	30	900	20	0	-3	100	-100	-100	.09
75	314	30	-600	-60	-6000	-3	-100	-100	-100	.11
75	314	30	600	20	0	-3	-100	-100	-100	.23
75	314	30	600	20	0	-3	100	-100	-100	.02
75	325	20	-300	-20	0	-3	-100	100	-100	.12
75	325	30	600	20	0	-3	-100	-100	-100	.06
75	325	30	900	20	0	-3	-100	-100	-100	.37
80	314	20	-600	-60	-6000	-3	-100	-100	-100	.09
80	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
85	314	30	-300	-80	-6000	-3	-100	-100	-100	.18
85	314	30	-300	-20	0	-3	-150	-100	-100	.32
95	325	40	-300	-80	-6000	-3	-100	-100	-100	.09
100	314	30	600	0	0	-3	150	-100	-100	.12
120	314	30	600	-80	-3000	-3				.03
120	314	40	600	-80	-3000	-3				.17
125	314	30	600	-80	-3000	-3				.03

COLLECTIVE PUSHOVER, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	304	40	900	20	-3000	3	100	-100	-100	.07
40	325	30	300	-60	0	-3	-100	-100	-150	.07
40	325	40	300	-60	0	-3	-100	-100	-150	.13
60	304	30	900	20	-3000	3	100	-100	-100	.07
60	325	30	300	-60	0	3	-100	-100	-150	.05
60	325	40	300	-60	-3000	3	-100	-100	-100	.05
70	314	10	-300	0	0	-3	-100	-100	100	.08
70	314	20	-300	0	0	-3	100	-100	-100	.17
70	325	10	300	20	-3000	-6	100	-100	200	.06
75	314	10	-300	0	0	-3	-100	-100	-100	.17

TABLE LXXVIII - Continued

COLLECTIVE PUSHOVER, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
75	314	40	600	20	-3000	-3	100	-100	-100	.08
75	325	10	300	20	-3000	-3	100	-100	150	.07
80	314	40	1500	20	0	-3	100	-100	-100	.08
80	325	20	300	20	-3000	-3	100	-100	-100	.06
80	325	20	300	20	-3000	-3	100	-100	150	.07
80	325	30	600	20	-3000	-3	100	-100	-100	.08
80	325	30	1500	20	0	-3	-100	-100	-100	.06
85	314	40	300	-80	-6000	-3	100	-100	-100	.05
85	325	40	-300	-80	-6000	-3	100	-100	-100	.07
90	325	30	600	20	-3000	-3	100	-100	-100	.06
90	325	40	-300	-80	-6000	-3	-100	-100	-100	.07
95	314	30	-300	0	0	-3	-100	-100	-100	.10
95	325	20	-300	0	0	-3	100	-100	-100	.10
90	325	40	-300	-40	-3000	-3				.04
95	325	30	-300	-40	-3000	-3				.04

COLLECTIVE PUSHOVER, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	30	-300	-60	-6000	-3	-100	-100	-100	.16
80	314	30	-300	0	-3000	-3	100	100	-100	.14
80	314	30	300	0	-3000	-3	100	100	-100	.05

COLLECTIVE PUSHOVER, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-600	-20	-3000	-3	100	-100	-100	.03
40	314	20	-600	-20	-3000	3	-100	-100	-100	.07
60	314	20	-600	-40	-3000	-6	-100	-100	100	.07
70	314	20	-600	-60	-3000	-6	-100	-100	-100	.04
80	314	30	-600	-60	-3000	-6	-100	-100	-100	.04
80	314	30	-600	-60	-3000	-3	-100	100	-100	0.00
80	314	30	-600	-40	-3000	-3	-100	100	-100	.03
85	314	30	-600	-60	-3000	-3	-100	100	-100	.05
95	314	40	-300	-20	-3000	-3	100	-100	-100	.03
100	314	20	-300	-20	-3000	-3	100	-100	-100	.19
105	314	30	-300	-20	-3000	-3	100	-100	-100	.03
110	314	20	-300	-20	-3000	-6	100	-100	-100	.03
115	314	20	-300	0	-3000	-6	100	-100	-100	.03
115	314	30	-300	-20	-3000	-3	-100	-100	-150	.05
115	314	30	-300	-20	-3000	-3	-100	-100	-100	.12
120	314	30	-300	-20	-3000	-3	100	-100	-100	.02

TABLE LXXVIII - Continued

COLLECTIVE PUSHOVFR, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	40	300	-60	-6000		-3	-100	-100	-100	.05
BLW	314	30	-300	-80	-6000		-3	100	-100	-100	.09
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.14
BLW	314	30	-300	-60	-6000		-3	100	-100	-100	.13
BLW	314	30	-300	-40	-6000		-3	-100	-100	-100	.18
BLW	314	30	300	-60	-6000		-3	-100	-100	-100	.28
BLW	314	40	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	314	40	300	-60	-6000		-9	-100	-100	-100	.09
BLW	314	40	300	-40	-6000		-6	-100	-100	-100	.05
BLW	314	40	300	-40	-6000		3	-100	-100	-100	.14
40	314	20	300	-40	-6000		-3	-100	-100	-100	.07
40	314	30	-300	-60	-6000		-3	-100	-100	-100	.11
40	314	40	-300	-60	-6000		3	-100	-100	-100	.13
60	314	30	-300	-80	-6000		-3	100	-100	-100	.30
60	314	30	-300	0	3000		3	-100	-100	-150	.03
70	314	30	-300	0	3000		3	-100	-100	-100	.03
70	314	30	300	-60	-6000		-3	-100	100	-100	.18
75	314	20	-300	-60	-6000		-3	-100	-100	-100	.12
75	314	20	-300	0	3000		-3	-100	-100	-100	.12
75	325	10	-300	20	0		-6	-100	-100	150	.03
80	325	10	-300	20	0		-6	-100	-100	-100	.03
85	314	20	-300	0	3000		-3	-100	-100	-100	.12
85	314	30	300	-60	-6000		-3	-100	100	-100	.09
85	314	30	300	20	0		-3	100	-100	-100	.08
85	325	20	-300	20	0		-3	-100	-100	-100	.12
85	325	20	600	-20	-3000		-3	100	-100	-100	.07
90	325	20	-300	20	0		-3	-100	-100	-100	.12
90	325	30	-300	-60	-6000		-3	-100	-100	-150	.05
95	314	10	-1500	0	3000		-3	-100	-100	-100	.09
95	314	20	-1500	0	6000		-3	-100	-100	-100	.11
95	314	30	-600	-60	-6000		-3	-100	-100	-100	.18
95	314	30	-600	-60	-3000		-3	-100	-100	-100	.09
95	314	30	-300	-60	-6000		-3	-100	-100	-150	.05
95	325	20	-1500	0	3000		-3	-100	-100	-100	.07
95	325	30	-600	-80	-6000		-3	-100	-100	-100	.04
95	325	30	-300	-80	BELOW		-3	150	-100	-100	.23
95	325	30	-300	-80	-6000		-3	-100	-100	-100	.07
95	325	40	-600	-80	-6000		-3	100	-100	-100	.07
100	314	30	-600	-60	-3000		-3	-100	100	-150	.07
100	314	30	-300	-60	-3000		-3	-100	100	-100	.10
100	325	30	-300	-80	-6000		-3	-100	-100	-100	.07
105	314	20	300	0	-3000		-3	150	-100	-100	.07
105	314	30	300	-80	BELOW		-3	100	-100	-100	.12
105	314	30	300	0	-3000		-3	100	-100	-100	.03
105	325	30	-300	-20	-3000		-3	100	-100	-100	.22
110	314	30	-300	-60	-6000		-3	100	-100	100	0.00
110	314	40	-300	-60	-6000		-3	100	-100	-100	.17
105	314	30	300	-40	-3000		-3				.05

TABLE LXXVIII - Continued

COLLECTIVE PUSHOVER, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	40	-600	-60	-6000	3	100	-100	-100	.05
40	314	40	-300	-40	BELOW	-3	150	-100	-100	.12
40	325	20	-600	-60	-6000	-3	-100	-100	-100	.02
40	325	30	-600	-60	-6000	-3	-100	-100	-100	.09
60	314	30	-300	-40	-6000	-6	100	-100	-100	.09
60	314	30	-300	-40	-6000	-3	100	-100	-100	.09
60	314	30	-300	-40	-6000	-3	150	-100	-100	.14
60	314	40	-300	-40	BELOW	-3	-100	-100	-100	.14
70	314	20	-300	0	-3000	-3	-100	-100	-100	.25
70	314	20	-300	0	-3000	-3	100	-100	-100	.33
75	314	40	-600	-40	-6000	-3	100	-100	-100	.09
75	325	20	-600	20	-3000	-3	100	-100	100	.28
75	325	20	-600	20	-3000	-3	100	-100	150	.07
75	325	20	-600	20	-3000	-3	150	-100	150	.06
75	325	30	-300	-80	-6000	3	-100	-100	-100	.04
75	325	30	300	-80	-3000	-3	-100	-100	·150	.18
80	314	30	-300	-60	BELOW	-3	100	-100	-100	.12
80	314	30	-300	-40	-6000	-6	100	- 00	-100	.04
80	314	40	-300	-60	BELOW	-3	-100	100	-100	.16
80	325	20	300	-80	-6000	-3	-100	-100	-100	.02
80	325	30	-300	-80	-6000	-6	-100	-100	-100	.04
80	325	30	300	-80	-6000	-3	-100	-100	-100	.09
85	314	20	300	0	0	-3	100	-100	-100	.08
85	314	30	-300	-40	-6000	-3	150	-100	-100	.10
85	325	20	-300	-80	-3000	-3	-100	-100	-100	.13
85	325	20	-300	20	0	-3	-100	-100	-100	.11
85	325	20	-300	20	0	-3	100	-100	100	.15
85	325	30	-600	-80	-3000	-3	-100	-100	-100	.07
90	314	30	-300	-40	-6000	-6	150	-100	-100	.04
90	314	40	-300	-40	BELOW	-3	-100	100	-100	.09
90	325	30	-900	-80	-6000	-3	-100	-100	-100	.11
90	325	30	-300	-80	-3000	-3	-100	-100	-100	.22
90	325	40	-300	-80	-6000	-3	100	-100	-100	.13
95	314	40	-900	-80	-6000	-3	-100	-100	-100	.03
95	314	40	-300	-80	-6000	-3	-100	-100	-100	.05
95	314	40	-300	-60	-3000	-3	-100	-100	-100	.05
95	325	30	-300	-80	-3000	-3	-100	-100	-100	.09
95	325	40	-600	-80	-6000	-3	100	-100	-100	.05
100	314	40	-300	-80	-3000	-3	-100	-100	-100	.28
100	325	20	-600	20	0	-3	100	-100	-100	.05
100	325	20	-600	20	0	-3	100	-100	100	.16
105	314	30	-300	-60	-6000	-3	250	-100	-100	.03
105	314	40	-300	-60	-6000	-3	100	-100	-100	.19
105	314	40	900	20	0	-3	100	100	-100	.03
105	325	10	-600	40	0	-3	100	-100	150	.03
105	325	20	900	20	0	-6	100	-100	-100	.04
110	325	30	900	20	0	-6	100	-100	-100	.04
110	325	40	900	20	0	-3	100	-100	-100	.07
105	314	30	300	-20	-3000	-3				.07
110	314	30	300	-20	-3000	-6				.03
115	314	30	-600	-60	-6000	-3				.05
115	314	30	300	-20	-3000	-6				.03
125	314	30	1500	-60	-6000	-3				.05
85		20	-300	20	0	-3	100	100	-100	.10

TABLE LXXVIII - Continued

COLLECTIVE PUSHOVER, LEVEL FLIGHT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	20	-300	0	-3000	-3	-100	100	-100	.12
85	325	30	-600	-80	BELOW	-3	100	-100	-100	.05
95	314	30	-300	-20	-3000	-3	100	-100	-150	.10
100	314	30	-900	-40	-6000	-3	100	-100	-100	.09
100	314	30	-600	-40	-3000	-3	-100	-100	-100	.09
100	314	30	-600	-40	-3000	-3	100	-100	-100	.09
100	314	30	-300	-40	-3000	-3	-100	100	-150	.10
100	314	30	-300	-20	-3000	-3	-100	100	-100	.09
105	314	30	-600	-40	-6000	-3	100	-100	-150	.07
105	314	30	-600	-40	-6000	-3	100	-100	-100	.05
105	314	30	-600	-40	-3000	-3	-100	-100	-100	.09
110	314	30	-300	-40	-6000	-3	-100	-100	-100	.03
110	314	40	-300	-40	-6000	-3	-100	100	-100	.09

COLLECTIVE PUSHOVER, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	20	-300	-40	-3000	-6	-100	100	-100	.09
60	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
70	314	20	-600	-40	-3000	-6	-100	-100	100	.13
70	314	20	-300	-40	-3000	-3	-100	100	-100	.03
70	314	30	-300	-40	-3000	-3	-100	100	-100	.05
85	314	20	-600	-40	-3000	-6	-100	-100	100	.13
100	314	30	-600	-40	-3000	-3	-100	-100	100	.07

COLLECTIVE PUSHOVER, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	0	6	100	-100	-100	.11
40	314	10	-600	-40	-6000	-3	-100	-100	100	.02
40	314	10	-600	-20	-3000	-6	-100	-100	100	.03
40	314	30	-300	0	0	6	100	-100	-100	.11
60	314	10	-600	-20	-3000	-6	-100	-100	100	.09
60	314	20	-600	-40	-6000	-6	-100	-100	100	.09
60	314	20	-600	-20	-3000	3	100	-100	-100	.07
60	314	20	-300	-60	-6000	-3	-100	-100	-100	.04
60	325	10	-600	-20	-3000	-6	-100	-100	200	.09
70	314	20	-600	-20	-3000	-3	-100	-100	-100	.09
70	314	20	-300	-60	-6000	-3	-100	-100	-100	.18
75	314	20	-600	-40	-6000	-3	-100	-100	-100	.14
75	325	10	-600	-20	-3000	-6	-100	-100	150	.04
80	325	10	-600	-20	-3000	-6	-100	-100	150	.04
80	325	20	-600	-20	-3000	-3	100	-100	-100	.09
85	314	30	-600	-40	-6000	-3	-100	-100	-100	.14
85	325	20	-1200	0	-3000	-3	150	100	-100	.17
85	325	30	-900	-80	BELOW	-3	-100	-100	-100	.13
95	314	20	-600	-60	BELOW	-3	-100	-100	150	.04
95	314	30	-900	-80	BELOW	-3	100	-100	-100	.14
100	314	30	-900	-80	BELOW	-3	100	-100	-100	.24
100	314	30	-600	-60	BELOW	-3	-100	-100	150	.04
105	314	30	-600	-60	BELOW	-3	100	-100	100	.09

TABLE LXXVIII - Concluded

COLLECTIVE PUSHOVER, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	10	-600	0	-3000	-6	100	-100	200	.10
40	314	10	-600	0	-3000	-6	100	-100	250	.07
40	325	10	-900	20	0	-6	-100	-100	250	.07
40	334	BLW	-900	20	0	-3	-100	-100	300	.18
60	314	10	-600	0	-3000	-6	-100	-100	250	.05
60	314	10	-600	0	-300C	-3	100	-100	150	.10
60	325	10	-900	20	0	-6	-100	-100	250	.07
60	325	10	-300	0	0	-6	-100	-100	150	.07
70	314	10	-300	0	0	-3	-100	-100	-100	.08
70	314	20	-600	0	-3000	-3	-100	-100	-100	.17
70	314	20	-600	0	-3000	-3	100	-100	100	.12
70	325	10	-900	20	0	-6	-100	-100	200	.07
75	325	10	-900	20	0	-3	100	-100	150	.07
80	325	20	-600	-60	BELOW	-3	-100	-100	-100	.02
80	325	20	-600	-60	BELOW	-3	100	-100	-100	.16
90	325	20	-900	-80	-3000	-3	-100	-100	-100	.05
90	325	30	-900	-80	-3000	-3	-100	-100	-100	.22
90	325	30	-300	-80	-6000	-3	-100	-100	-100	.16
90		20	-300	20	-3000	-3	150	100	-100	.07
95		10	-300	0	-3000	-3	100	100	150	.03

COLLECTIVE PUSHOVER, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	20	-900	-40	-6000	-3	100	-100	-100	.14
110	314	40	-300	-40	BELOW	3	150	-100	-100	.03
115	314	30	-300	-40	BELOW	3	200	-100	-100	.03

TABLE LXXIX. TIME FOR CYCLIC PUSHOVER DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

CYCLIC PUSHOVER, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
75	325	20	-300	-20	0	-3	-100	100	-100	.16

CYCLIC PUSHOVER, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	40	-300	-60	-6000	-3	-100	-100	-100	.09
BLW	304	40	300	-60	-6000	3	-100	-100	-100	.07
BLW	314	20	-300	-40	-6000	-3	-100	-100	-100	.09
BLW	314	30	-300	-80	-6000	-6	-100	-100	-100	.07
BLW	314	40	-300	-80	-6000	-3	-100	-100	-100	.07
BLW	314	40	300	-60	-6000	-3	-100	-100	-100	.21

CYCLIC PUSHOVER, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	30	-300	-40	BELOW	-3	100	-100	-100	.07
40	314	30	-300	-20	-6000	-3	100	-100	-100	.12
40	314	40	-300	-40	BELOW	-3	-100	-100	-100	.05
40	314	40	-300	-20	-6000	-3	150	-100	-100	.21

TABLE LXXIX - Concluded

CYCLIC PUSHOVER, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-600	0	0	-3	-100	-100	-100	.22
40	314	20	-600	-20	-3000	-3				.09
40	314	30	-600	-20	-3000	-3				.09
40	314	30	-600	-20	-3000	3				.09
60	314	30	-600	-20	-3000	-3				.05
75	314	20	-300	-20	-3000	-3				.09
80	314	20	-300	-20	-3000	-3				.04
85	314	20	-300	-20	-3000	-3				.04

CYCLIC PUSHOVER, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	30	-300	-40	-6000	-3	-100	-100	-100	.02
60	314	20	-300	-60	-6000	-3	-100	-100	-100	.16
80	314	10	-900	0	0	-3	-100	-100	-100	.05
85	314	20	-900	0	0	-3	-100	-100	-100	.10
90	314	20	-900	0	0	-3	-100	-100	-100	.05

TABLE LXXX. TIME FOR COLLECTIVE PULL-UP DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

COLLECTIVE PULLUP, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	325	30	-600	-40	-6000	-3	-100	-100	-100	.09

COLLECTIVE PULLUP, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	40	-300	20	0	9	-100	-100	-100	.06
BLW	325	20	-300	20	0	-3	-100	-100	100	.09
90	314	30	-900	-40	-3000	-3	-100	-100	-100	.09
90	314	40	-900	-40	-3000	-3	-100	-100	-100	0.00

COLLECTIVE PULLUP, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	325	20	-600	20	-3000	3	100	-100	100	.03
60	325	10	-600	20	-3000	-3	100	-100	200	.09
110	314	20	-600	-60	-6000	-3				.10

COLLECTIVE PULLUP, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	325	20	-300	0	-3000	-3	100	100	-100	.07

TABLE LXXX - Continued

COLLECTIVE PULLUP, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-300	-20	-3000	-3	-100	-100	-100	.16
40	314	20	-300	-20	-3000	3	-100	-100	-100	.05
70	314	20	-300	0	-3000	3	100	-100	-100	.02
75	314	20	-300	0	-3000	3	100	-100	-100	.13
90	314	30	-300	0	-3000	3	100	-100	-100	.13

COLLECTIVE PULLUP, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	40	-600	-40	-6000	-3	-100	-100	-100	.04
BLW	314	20	-600	-80	-6000	-3	100	-100	-100	.11
BLW	314	20	-600	-60	-6000	-6	-100	-100	-100	.33
BLW	314	20	-600	-40	-6000	-9	-100	-100	-100	.04
BLW	314	20	-600	-40	-6000	-6	-100	-100	-100	.05
BLW	314	20	-300	-60	-6000	-6	100	-100	-100	.04
BLW	314	20	-300	-60	-6000	-3	-100	-100	-100	.13
BLW	314	30	-600	-60	-6000	-3	-100	-100	-100	.04
BLW	314	30	-600	-60	-6000	-3	100	-100	-100	.13
BLW	314	30	-600	-40	-6000	3	-100	-100	-100	.12
BLW	314	30	-600	-40	-6000	6	100	-100	-100	.05
BLW	314	30	-600	-40	-6000	6	150	-100	-100	.09
BLW	325	20	-300	20	0	-6	-100	-100	100	.08
BLW	325	20	-300	20	0	-3	100	-100	-100	.08
BLW	325	30	-300	20	0	3	-100	-100	-100	.08
40	314	10	-300	-80	-6000	-6	-100	-100	100	.14
40	325	10	-300	20	0	-6	-100	-100	150	.13
70	325	10	-300	20	0	-6	-100	-100	250	.13
95	325	30	-600	-80	-6000	-3	-100	-100	-100	.05

COLLECTIVE PULLUP, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-40	-6000	6	-100	-100	-100	.03
BLW	314	50	300	-40	BELOW	3	100	-100	-100	.03
BLW	325	30	-300	-60	-6000	-3	-100	-100	-100	.11
BLW	325	30	300	-60	-6000	-3	-100	-100	-100	.13
40	314	10	-300	-40	-6000	-6	-100	-100	-100	.09
40	314	20	-900	-40	-6000	-6	-100	-100	-100	.07
40	314	20	-600	-40	-6000	-3	-100	-100	100	.12
40	314	30	-600	-40	BELOW	-3	100	-100	-100	.10
40	314	30	-300	-60	BELOW	-3	100	-100	-100	.07
40	314	30	-300	-40	BELOW	-3	-100	-100	-100	.07
40	314	30	300	-40	BELOW	-9	-100	-100	-100	.04
40	325	10	-300	-40	-6000	-6	-100	-100	150	.03
40	325	10	-300	40	0	-3	-100	-100	150	.11
40	325	20	-300	-60	-6000	-3	-100	-100	-100	.16
60	314	20	-900	-40	-6000	-9	-100	-100	100	.03
60	314	20	-600	-40	BELOW	-3	-100	-100	100	.10
60	314	20	-600	-40	-6000	-9	-100	-100	100	.03
60	314	20	300	-40	BELOW	-9	-100	-100	100	.04
70	314	20	-600	-40	-6000	-3	150	-100	100	.12
70	314	20	300	-40	BELOW	-9	-100	-100	100	.03
70	314	30	-900	-40	BELOW	-3	100	-100	-100	.07

TABLE LXXX - Continued

COLLECTIVE PULLUP, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	40	300	20	0		-3	100	-100	-100	.03
70	325	20	300	20	0		-3	100	-100	-100	.10
75	314	20	-300	-40	-6000		-6	100	-100	-100	.03
75	314	20	-300	-40	-6000		-3	100	-100	-100	.16
75	314	20	300	-40	BELOW		-9	-100	-100	100	.03
75	314	30	-300	-40	BELOW		-3	100	100	-100	.05
80	314	30	-300	-40	BELOW		-3	100	-100	-100	.07
80	325	30	300	-80	-6000		-3	-100	-100	-100	.07
80	325	30	300	-80	-6000		3	-100	-100	-100	.04
85	314	20	-300	-40	BELOW		-3	100	-100	-100	.07
85	325	20	-900	-80	-3000		-3	-100	-100	-100	.18
90	314	20	-300	-40	BELOW		-6	-100	-100	-100	.02
90	325	30	-1200	-80	-6000		-3	-100	-100	-100	.05
90	325	30	-900	-80	-3000		-3	-100	-100	-100	.09
105	314	40	-300	20	0		-3	-100	100	-100	.04
105	314	40	-300	20	0		-3	100	100	-100	.07
105	325	30	-300	20	0		-3	100	-100	-100	.06

COLLECTIVE PULLUP, LEVEL FLIGHT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.19
40	325	10	-300	0	-3000		-3	-100	-100	100	.24
105	314	40	-300	-60	BELOW		-3	150	-100	-100	.09

COLLECTIVE PULLUP, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	10	-600	-80	BELOW		-3	-100	-100	100	.29
95	314	20	-1800	-40	-3000		-3	-100	-100	150	.13
100	314	20	-1800	-40	-3000		-3	-100	-100	150	.22

COLLECTIVE PULLUP, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000		-6	-100	-100	-100	.12
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.18
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.12
BLW	325	10	-600	20	-3000		-3	-100	-100	150	.14
40	314	20	-300	-60	-6000		-6	-100	-100	100	.12
40	334	10	-600	20	-3000		-3	-100	-100	200	.06
60	314	20	-300	-60	-6000		-6	-100	-100	-100	.11
75	325	10	-1200	-20	0		-3	-100	100	-100	.10
80	314	20	-300	-60	-6000		-6	-100	-100	-100	.07
90	314	10	-300	-60	-6000		-6	-100	-100	100	.07
95	325	30	-300	-80	BELOW		-3	100	-100	-100	.11
95	325	30	-300	-80	-6000		-3	-100	-100	-100	.05
100	314	20	-900	-40	-3000		-3	-100	-100	100	.11
100	314	30	-900	-60	-6000		-3	100	-100	-100	.03
105	314	20	-900	-60	-6000		-3	-100	100	-100	.16
100	314	20	-900	-40	-3000		-3				.14
105	314	30	-900	-40	-3000		-3				.16

TABLE LXXX - Concluded

COLLECTIVE PULLUP, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	30	-300	-80	-6000	-6	-100	-100	-100	.07
40	314	BLW	-900	0	-3000	-6	-100	-100	250	.03
40	314	BLW	-900	0	-3000	-3	1 0	-100	200	.08
40	314	BLW	-600	0	0	-6	-100	-100	200	.08
40	314	10	-600	0	-3000	-3	-100	-100	150	.08
40	325	10	-300	-80	-6000	-6	-100	-100	100	.18
40	325	20	-300	-80	BELOW	-3	-100	-100	-100	.07
60	314	10	-600	0	0	-6	-100	-100	200	.05
60	325	20	-1200	-80	BELOW	-3	-100	-100	-100	.05
60	325	20	-600	-80	BELOW	-3	-100	-100	-100	.04
60	325	20	-300	-60	-3000	-9	-100	-100	-100	.02
60	325	20	-300	-60	-3000	-3	-100	-100	-100	.07
70	325	10	-1200	-60	-3000	-3	-100	100	-100	.08
75	325	10	-1200	-60	-3000	-3	-100	-100	-100	.04
80	325	20	-1200	-60	-3000	-3	-100	-100	-100	.08
85	325	20	-2100	-80	-6000	-3	-100	-100	-100	.07
85	325	20	-1800	-80	-6000	-3	-100	-100	-100	.05
85	325	20	-900	-80	-6000	-3	-100	-100	-100	.05
85	325	20	-600	-80	-6000	3	-100	-100	-100	.05
90	325	30	-600	-80	-6000	-3	100	-100	-100	.07
90	325	30	-300	-80	-6000	-3	-100	-100	-100	.13
95	314	30	-1500	-60	-6000	-3	-100	-100	-100	.10
95	314	30	-900	-60	-3000	-3	-100	-100	-100	.03
95	325	30	-900	-80	-6000	-3	-100	-100	-100	.09
95	314	30	-300	-60	-6000	-3				.14
100	314	20	-300	-60	-6000	-3				.09
105	314	10	-1500	-40	-3000	-3				.07
105	314	30	-1500	-40	-3000	-3				.09

COLLECTIVE PULLUP, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-600	0	-3000	-6	-100	-100	-100	.10
40	314	20	-300	0	-3000	-3	200	-100	-100	.12
40	314	30	-300	0	-3000	-3	150	-100	-100	.05
40	325	10	-600	0	-3000	-3	-100	-100	150	.14
95	314	30	-600	-60	BELOW	-3	150	-100	-100	.09
95	314	30	-600	-40	-6000	-3	100	-100	-100	.03
95	314	30	-600	-40	-3000	-3	-100	100	-100	.03
95	325	20	-600	-40	-3000	-3	-100	-100	-100	.07
100	314	30	-900	-40	-6000	-3	100	-100	-100	.10
100	314	30	-600	-40	-3000	-3	-100	-100	-100	.07
110	314	20	-1500	-40	-6000	-3	150	-100	-100	.05
110	314	30	-1500	-40	-6000	-3	150	-100	-100	.05

TABLE LXXXI. TIME FOR CYCLIC PULL-UP DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

CYCLIC PULLUP, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-20	0	-3	-100	-100	-100	.09
BLW	314	30	-300	0	0	-3	-100	-100	-100	.09
BLW	314	30	-300	0	0	-3	-100	100	-100	.09
BLW	325	30	-300	-60	BELOW	-3	100	-100	-100	.09
BLW	325	30	-300	-60	-6000	-3	100	-100	-100	.14

CYCLIC PULLUP, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-600	0	-3000	-3	150	-100	-100	.17
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.17
BLW	314	30	-300	20	-3000	-3	-100	-100	-100	.24
BLW	325	30	-300	20	-3000	-3	-100	-100	-100	.11
BLW	325	40	-300	-40	-6000	3	100	-100	-100	.03
40	325	40	-300	-40	-6000	-3	100	-100	-100	.16

CYCLIC PULLUP, HOVER, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-600	20	0	-3	100	-100	-100	.09
BLW	314	20	-600	20	0	-3	150	-100	-100	.09

CYCLIC PULLUP, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-40	-3000	3	-100	-100	-100	.09

CYCLIC PULLUP, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.27
BLW	314	30	-300	-60	-6000	-3	100	-100	-100	.12
40	314	20	-300	-80	-6000	-3	-100	-100	-100	.32
40	314	30	-300	-40	-3000	-3	-100	-100	-100	.18
60	314	30	-300	-60	-3000	-3	-100	-100	-100	.15
70	314	20	-300	-20	-3000	-15	-100	100	-100	.02
75	314	20	-300	-20	-3000	-3	-100	-100	-100	.08
80	314	20	-300	-20	-3000	-15	-100	-100	-100	.02
80	314	20	-300	-20	-3000	-6	-100	-100	-100	.04
85	314	20	-600	-20	3000	-3	-100	-100	-100	.05
90	314	20	-600	-20	3000	-3	-100	-100	-100	.14
90	314	20	-300	-20	-3000	-6	-100	-100	-100	.06
95	314	20	-300	-20	-3000	-6	100	-100	-100	.06
90	314	20	-300	-20	-3000	-6				.03
95	314	20	-300	-20	-3000	-6				.03
105	314	30	-300	-20	-3000	-6				.06
110	314	40	-300	-20	-3000	-3				.05
115	314	30	-300	-20	-3000	-6				.06

TABLE LXXXI - Continued

CYCLIC PULLUP, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	40	-900	-80	-6000	3	-100	-100	-100	.09
40	314	20	-300	-40	-6000	-3	-100	-100	-100	.02
40	325	10	-300	40	0	-6	-100	-100	150	.04
60	314	30	-300	-40	-6000	-6	-100	-100	-100	.10
70	314	20	-300	-40	-6000	-3	100	-100	-100	.04
70	325	10	-300	20	0	-6	-100	-100	150	.10
75	314	20	-300	-40	-6000	-3	100	-100	-100	.04
75	314	20	-300	0	-3000	-3	-100	-100	-100	.07
75	314	30	-300	-40	-6000	-15	-100	-100	-100	.02
80	314	20	-300	-40	-6000	-3	100	-100	-100	.09
80	314	20	-300	0	-3000	-3	-100	-100	-100	.05
85	314	20	-300	-40	-6000	-6	100	-100	-100	.04
85	314	30	-300	-40	-6000	-15	-100	-100	-100	.02
85	325	10	-300	20	0	-6	-100	-100	150	.10
85	325	30	-300	-20	0	-3	-100	100	-100	.09
90	314	30	-300	-40	-6000	-12	-100	-100	-100	.02
90	325	10	-300	20	0	-6	-100	-100	150	.03
95	314	30	-300	-40	-6000	-12	100	-100	-100	.02
95	314	30	-300	-40	-6000	-6	100	-100	-100	.04
95	325	10	-300	20	0	-6	-100	-100	150	.03
100	314	30	-300	-40	-6000	-6	150	-100	-100	.04
100	314	30	-300	20	0	-3	100	-100	-100	.04
100	325	20	-300	40	0	-3	-100	-100	-100	.07
105	314	30	-300	-40	-6000	-6	150	-100	-100	.04
105	314	40	-300	-40	-6000	-3	150	100	-100	.09

CYCLIC PULLUP, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	30	600	-40	-3000	-3	-100	-100	-100	.09
80	314	30	600	-40	-3000	-6	-100	100	-100	.04
85	314	30	600	-40	-3000	-6	-100	100	-100	.04
90	314	40	600	-40	-3000	-6	-100	-100	-100	.03

CYCLIC PULLUP, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	325	10	-600	-20	-6000	-6	-100	-100	100	.09
40	325	20	-300	-20	-6000	-3	-100	-100	-100	.03
60	314	20	-600	-80	BELOW	-6	-100	-100	100	.09
60	325	20	-300	-20	-6000	-3	-100	-100	-100	.12
70	314	20	-600	-80	BELOW	-6	-100	-100	-100	.04
70	325	10	-600	-20	-6000	-6	-100	-100	100	.09
70	325	10	-300	-20	-6000	-3	100	-100	100	.12
75	314	20	-600	-80	BELOW	-6	-100	-100	-100	.04
75	325	10	-600	-20	-6000	-6	-100	-100	100	.03
75	325	20	-300	-20	-6000	-3	-100	-100	100	.04
80	325	10	-600	-20	-6000	-6	100	-100	100	.03
80	325	20	-300	-20	-6000	-3	-100	-100	-100	.04
85	314	20	-600	-80	BELOW	-3	-100	-100	-100	.13
85	325	10	-600	-20	-6000	-3	100	-100	-100	.09
90	325	20	-600	-20	-3000	-3	100	-100	-100	.09
90	325	20	-300	-20	-6000	-3	100	-100	-100	.22
95	314	30	-600	-80	BELOW	-3	-100	-100	-100	.13

TABLE LXXXI - Concluded

CYCLIC PULLUP, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	20	-600	-20	-3000	-3	100	-100	-100	.24
100	325	20	-300	-20	-6000	-3	100	-100	-100	.22
105	314	20	-1500	-60	-6000	-3	-100	-100	-100	.10
105	325	30	-300	-20	-6000	-3	100	-100	-100	.17
40	314	20	-600	-20	-3000	-6				.09
60	314	20	-600	-20	-3000	-6				.04
70	314	20	-600	-20	-3000	-6				.04

CYCLIC PULLUP, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	10	-300	0	-3000	-6	-100	-100	150	.08
60	314	20	300	0	-3000	-3	100	-100	-100	.17
60	325	10	-300	20	-3000	-6	100	-100	250	.08
60	325	20	-900	-40	-6000	-3	-100	-100	100	.09
60	325	20	-600	-80	BELOW	-3	-100	-100	-100	.05
70	314	10	-900	20	0	-3	-100	-100	100	.05
70	314	10	-300	0	-3000	-3	-100	-100	100	.08
70	325	30	-600	-80	BELOW	-3	-100	-100	-100	.09
75	314	10	-900	20	0	-3	-100	-100	-100	.05
75	314	20	-900	-40	-6000	-6	-100	-100	100	.04
75	325	10	-300	20	-3000	-6	100	-100	200	.08
75	325	30	-600	-80	BELOW	-6	-100	-100	-100	.04
80	314	20	-900	-40	-6000	-6	-100	-100	100	.04
80	325	30	-600	-80	-6000	-6	-100	-100	-100	.04
85	314	30	-900	-40	-6000	-6	-100	-100	-100	.04
85	325	10	-300	20	-3000	-6	100	-100	200	.08
90	314	30	-900	-40	-6000	-6	-100	-100	-100	.04
90	314	30	-900	-40	-6000	-3	-100	-100	-100	.04
90	325	20	-300	20	-3000	-3	150	-100	100	.06

CYCLIC PULLUP, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	325	20	-600	-80	BELOW	-3	-100	-100	-100	.09
75	325	30	-600	-80	BELOW	-3	-100	-100	-100	.09
85	325	30	-600	-80	BELOW	-3	100	-100	-100	.09

TABLE LXXXII. TIME FOR FLARE DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

FLARE, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-600	-40	-6000	-3	-100	-100	-100	.16
BLW	314	30	-600	-40	-3000	-3	100	-100	-100	.11
BLW	314	40	-600	-40	-6000	-3	-100	-100	-100	.04

TABLE LXXXII - Continued

FLARE, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-40	-6000	-6	150	-100	-100	.07
40	314	20	-300	-40	-6000	-12	100	-100	100	.03

FLARF, DESCENT, 6000 LB

VFL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	300	-20	-3000	-6	-100	-100	-100	.05
BLW	314	20	-1200	-40	-3000	-3	-100	-100	100	.09
BLW	314	20	-600	-40	-3000	-3	-100	-100	-100	.17
BLW	314	20	-600	-40	-3000	-3	-100	-100	100	.07
BLW	314	20	300	-20	-3000	-6	100	-100	-100	.09
BLW	325	20	-300	-20	-3000	-3	-100	-100	-100	.17
40	314	10	-600	-40	-3000	-3	-100	-100	150	.19
40	314	20	-1200	-40	-3000	-3	-100	-100	100	.03

FLARE, DESCENT, 7000 LB

VFL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIMF
BLW	314	10	-600	-80	-6000	-6	-100	-100	100	.07
BLW	314	20	-900	-60	BELOW	-3	-100	-100	-100	.29
BLW	314	20	-900	-60	-6000	-9	-100	-100	100	.05
BLW	314	20	-900	-60	-6000	-3	100	-100	-100	.05
BLW	314	20	-900	-20	-3000	-3	-100	-100	-100	.05
BLW	314	20	-600	-80	-6000	-3	100	-100	-100	.09
BLW	314	20	-600	0	0	-3	-100	-100	-100	.03
BLW	314	20	-300	-40	-6000	-3	-100	-100	-100	.14
BLW	314	20	-300	-20	-3000	-6	100	-100	100	.09
BLW	314	20	-300	-20	-3000	-3	-100	-100	-100	.16
BLW	314	20	-300	0	-3000	-3	100	-100	-100	.18
BLW	314	30	-900	-40	-3000	-3	-100	-100	-100	.05
BLW	314	30	-600	-80	-6000	3	-100	-100	-100	.04
BLW	314	30	-600	-40	-3000	-3	-100	-100	-100	.04
BLW	314	30	-600	-20	-3000	-3	-100	-100	-100	.03
BLW	314	30	-600	20	-3000	3	-100	-100	-100	.03
BLW	314	30	-300	-60	-3000	-3	-100	-100	-100	.09
BLW	314	30	-300	-60	-3000	-3	100	-100	-100	.17
BLW	314	40	-300	-60	-3000	-6	-100	-100	-150	.03
BLW	325	10	-600	-20	-3000	-6	-100	-100	-100	.09
BLW	325	10	-600	20	-3000	-3	-100	-100	150	.15
BLW	325	10	-300	0	-3000	-3	100	-100	150	.17
BLW	325	20	-600	-20	-3000	-6	-100	-100	-100	.03
BLW	325	20	-600	-20	0	-3	-100	-100	-100	.12
BLW	325	20	-600	-20	0	-3	-100	100	-100	.09
BLW	325	20	-600	0	0	-3	-100	-100	-100	.12
BLW	325	20	-300	-80	BELOW	-3	-100	-100	-100	.25
BLW	325	20	-300	0	-3000	-3	100	-100	-100	.15
BLW	325	20	-300	0	-3000	-3	150	-100	-100	.15
40	314	10	-900	-20	-3000	-6	-100	-100	150	.16
40	314	10	-600	-40	-6000	-3	-100	-100	100	.25
40	314	10	-300	-20	-3000	-6	100	-100	100	.10
40	314	10	-300	0	-3000	-3	100	-100	100	.30
40	314	10	-300	0	-3000	-3	100	-100	150	.08

TABLE LXXXII - Continued

FLARE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
40	325	10	-900	-40	-3000		-3	-100	-100	150	.19
40	325	10	-600	-20	-3000		-9	100	-100	100	.05
40	325	10	-600	-20	-3000		-6	-100	-100	200	.09
40	325	10	-600	20	-3000		-3	-100	-100	250	.25
40	325	10	-300	-20	-6000		-3	-100	-100	100	.24
40	325	20	-600	-80	BELOW		-3	-100	-100	-100	.22
40	325	20	-600	-20	-3000		-6	-100	-100	100	.09
40	325	20	-300	-60	BELOW		-3	-100	-100	150	.26
40	325	20	-300	-60	-6000		-3	-100	-100	-100	.29
40	325	20	-300	-20	-6000		-3	-100	-100	-100	.24
BLW	314	30	-600	-80	BELOW		-3				.12
40	314	10	-600	-80	BELOW		-6				.17

FLARE, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-900	0	-3000		-3	100	-100	150	.08
BLW	314	10	-600	0	-3000		-3	-100	-100	150	.10
BLW	314	10	-300	0	-3000		-6	100	-100	100	.14
BLW	314	10	-300	20	0		-3	-100	-100	-100	.19
BLW	314	20	-600	0	-3000		-3	-100	-100	-100	.07
BLW	314	20	-600	0	-3000		-3	100	-100	-100	.34
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.25
BLW	314	20	-300	0	-3000		-3	150	-100	-100	.14
BLW	314	20	-300	0	-3000		-3	150	-100	100	.10
BLW	314	20	-300	20	0		-3	100	-100	-100	.34
BLW	314	20	-300	20	0		-3	150	-100	-100	.22
BLW	314	30	-300	-80	BELOW		-3	-100	-100	-100	.57
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.14
BLW	325	10	-600	0	-3000		-3	100	-100	100	.10
BLW	325	10	-600	20	0		-6	-100	-100	150	.07
BLW	325	10	-600	20	0		-6	-100	-100	200	.03
BLW	325	10	-300	0	0		-3	100	-100	150	.25
BLW	325	10	-300	20	0		-6	-100	-100	100	.08
BLW	325	10	-300	20	0		-3	-100	-100	100	.15
BLW	325	20	-600	20	0		-6	-100	-100	-100	.07
BLW	325	20	-300	-60	-6000		-3	-100	-100	-100	.14
BLW	325	20	-300	0	0		-3	100	-100	-100	.14
BLW	325	20	-300	20	-3000		-3	-100	-100	150	.28
BLW	325	20	-300	20	-3000		-3	100	-100	100	.13
BLW	325	30	-600	20	0		-6	-100	-100	-100	.07
BLW	325	30	-300	40	-3000		-3	-100	-100	-100	.07
BLW	325	30	-300	40	-3000		-3	100	-100	-100	.22
40	314	10	-300	0	-3000		-3	-100	-100	150	.27
40	314	10	-300	20	0		-3	-100	-100	100	.19
40	314	20	-600	-60	BELOW		-6	-100	-100	-100	.10
40	314	20	-300	-80	BELOW		-3	-100	-100	-100	.35
40	314	20	-300	0	-3000		-3	150	-100	-100	.12
40	325	10	-300	20	-3000		-6	-100	-100	250	.24
60	325	10	-300	-60	BELOW		-3	-100	-100	100	.28
BLW		10	-300	0	-3000		-3	100	-100	-100	.12
BLW		20	-300	0	-3000		-3	100	-100	-100	.27
BLW		30	-300	0	-3000		-3	100	-100	-100	.22
40		10	-300	0	-3000		-3	100	-100	150	.20

TABLE LXXXII - Concluded

FLARE, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-600	20	-3000	-3	100	-100	100	.17
BLW	314	10	-300	0	-3000	-6	100	-100	-100	.09
BLW	314	10	-300	0	-3000	-6	150	-100	-100	.09
BLW	314	20	-600	20	0	-3	150	-100	-100	.09
BLW	314	20	-300	0	-3000	-6	-100	-100	-100	.08
BLW	314	20	-300	0	-3000	-6	150	-100	-100	.12
BLW	314	20	-300	0	-3000	-3	-100	-100	-100	.05
BLW	314	20	-300	0	-3000	-3	150	-100	-100	.07
BLW	314	30	-600	-60	BELOW	-3	100	-100	-100	.10
BLW	314	30	-600	20	-3000	-3	-100	-100	-100	.03
BLW	314	30	-600	20	0	-3	100	-100	-100	.05
BLW	325	20	-300	0	-3000	-6	-100	-100	100	.12
40	314	10	-300	0	-3000	-6	100	-100	-100	.07
40	314	10	-300	0	-3000	-3	100	-100	100	.09
40	314	20	-600	-60	BELOW	-6	-100	-100	-100	.12
40	325	10	-600	20	0	-3	150	-100	150	.17

TABLE LXXXIII. TIME FOR STEADY STATE DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

STEADY STATE, GRD CONDITION, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-60	-6000	-3	-100	-100	-100	.60
BLW	BLW	BLW	-300	-20	-3000	-3	-100	-100	100	1.09
BLW	BLW	BLW	-300	0	-3000	-3	-100	-100	-100	1.24
BLW	284	10	-300	-60	-6000	-3	-100	-100	-100	.24
BLW	314	10	-300	-40	-3000	-3	-100	-100	150	.85
BLW	314	30	-300	-40	-3000	-3	-100	-100	-100	1.73

STEADY STATE, GRD CONDITION, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-80	BELOW	-3	-100	-100	-100	.91
BLW	BLW	BLW	-300	-60	-6000	-3	-100	-100	-100	1.80
BLW	BLW	BLW	-300	-40	BELOW	-3	-100	-100	-100	1.33
BLW	BLW	BLW	-300	-40	-6000	-3	-100	-100	-100	1.70
BLW	BLW	BLW	-300	-40	-3000	-3	-100	-100	-100	1.95
BLW	BLW	BLW	-300	-20	-6000	-3	-100	-100	100	2.27
BLW	BLW	BLW	-300	-20	-3000	-3	-100	-100	-100	.43
BLW	BLW	BLW	-300	-20	-3000	-3	-100	-100	100	5.82
BLW	BLW	BLW	-300	-20	-3000	-3	-100	-100	150	1.21
BLW	BLW	BLW	-300	0	-3000	-3	-100	-100	-100	7.30
BLW	BLW	BLW	-300	0	-3000	-3	-100	-100	100	2.53
BLW	BLW	BLW	-300	40	0	-3	-100	-100	-100	1.02
BLW	BLW	10	-300	-60	BELOW	-3	-100	-100	-100	.48
BLW	BLW	10	-300	-60	-6000	-3	-100	-100	-100	.44
BLW	BLW	10	-300	-40	-3000	-3	-100	-100	-100	1.53
BLW	274	BLW	-300	40	0	-3	-100	-100	150	1.29
BLW	274	10	-300	-20	-6000	-3	-100	-100	150	.52
BLW	284	BLW	-300	0	-3000	-3	-100	-100	150	.15
BLW	284	10	-300	-60	-6000	-3	-100	-100	100	.58
BLW	284	10	-300	-20	-3000	-3	-100	-100	-150	2.62
BLW	284	10	-300	-20	-3000	-3	-100	-100	100	1.17
BLW	284	10	-300	0	-3000	-3	-100	-100	-150	3.72
BLW	284	10	-300	20	-3000	-3	-100	-100	200	.37
BLW	294	10	-300	-60	-6000	-3	-100	-100	100	2.69
BLW	294	10	-300	40	0	-3	-100	-100	200	.56
BLW	304	10	-300	-80	BELOW	-3	-100	-100	-100	.37
BLW	304	10	-300	-20	-3000	-3	-100	-100	300	.43
BLW	304	10	-300	40	0	-3	-100	-100	200	.56
BLW	314	10	-300	-80	BELOW	-3	-100	-100	100	.31
BLW	314	10	-300	-60	-6000	-3	-100	-100	100	.53
BLW	314	10	-300	-60	-6000	-3	-100	-100	200	.54
BLW	314	10	-300	-40	-6000	-3	-100	-100	150	.69
BLW	314	10	-300	-40	-3000	-3	-100	-100	100	.81
BLW	314	10	-300	-20	-3000	-6	-100	-100	250	.02
BLW	314	10	-300	-20	-3000	-3	-100	-100	150	.36
BLW	314	10	-300	-20	-3000	-3	-100	-100	250	.22
BLW	314	10	-300	-20	-3000	-3	-100	100	250	.50
BLW	314	10	-300	-20	-3000	6	-100	100	300	.02
BLW	314	10	-300	0	-3000	-3	-100	-100	-200	2.79
BLW	314	10	-300	0	-3000	-3	-100	-100	150	.23
BLW	314	10	-300	0	-3000	-3	-100	-100	200	.33
BLW	314	10	-300	0	-3000	-3	-100	-100	250	.34
BLW	314	10	-300	0	0	-3	-100	-100	250	2.15

TABLE LXXXIII - Continued

STEADY STATE, GRD CONDITION, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	0	0		-3	-100	-100	300	23.19
BLW	314	20	-300	-60	BELOW		-3	-100	-100	-100	.34
BLW	314	20	-300	-60	BELOW		-3	-100	-100	100	.77
BLW	314	20	-300	-60	-6000		-6	-100	-100	200	.11
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.58
BLW	314	20	-300	-40	-3000		-3	-100	-100	150	.21
BLW	325	10	-300	-60	-6000		-3	-100	-100	100	.27
BLW	325	10	-300	-60	-6000		-3	-100	-100	200	1.56
BLW	325	10	-300	-20	0		-3	-100	-100	250	2.00
BLW	325	10	-300	20	-3000		-3	-100	-100	250	.18
BLW	325	10	-300	20	0		-3	-100	-100	250	.89
BLW	334	10	-300	-40	-6000		-3	-100	-100	300	.26
BLW	BLW	10	-300	-100	BELOW		-3				2.00
BLW	314	10	-300	-100	BELOW		-3				.24

STEADY STATE, GRD CONDITION, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-80	BELOW		-3	-100	-100	-100	1.73
BLW	BLW	BLW	-300	-60	-6000		-3	-100	-100	-100	1.62
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	150	1.56
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	200	3.58
BLW	BLW	BLW	-300	0	0		-3	-100	-100	150	4.09
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	-100	3.66
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	100	1.20
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	150	1.81
BLW	BLW	BLW	-300	20	-3000		-3	100	-100	100	1.56
BLW	BLW	BLW	-300	20	0		-3	-100	-100	-100	1.37
BLW	BLW	BLW	-300	20	0		-3	-100	-100	100	4.47
BLW	BLW	BLW	-300	20	0		-3	-100	-100	150	14.70
BLW	BLW	BLW	-300	40	-3000		-3	-100	-100	-100	4.19
BLW	BLW	BLW	900	20	-3000		-3	-100	-100	-100	.25
BLW	BLW	10	-300	-100	BELOW		-3	-100	-100	-100	3.49
BLW	BLW	10	-300	-80	BELOW		-3	-100	-100	-100	4.73
BLW	BLW	10	-300	-60	BELOW		-3	-100	-100	-100	1.59
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	-100	1.74
BLW	BLW	10	-300	-40	BELOW		-3	-100	-100	-100	1.17
BLW	BLW	10	-300	-40	-6000		-3	-100	-100	100	.87
BLW	BLW	10	-300	-20	-6000		-3	-100	-100	-100	2.88
BLW	274	BLW	-300	0	-3000		-3	-100	-100	250	.34
BLW	284	10	-300	0	-3000		-3	-100	-100	300	.12
BLW	284	10	-300	20	-3000		-3	100	-100	200	.10
BLW	284	10	-300	20	0		-3	-100	-100	250	.22
BLW	294	10	-300	-60	-6000		-3	-100	-100	100	.45
BLW	294	10	-300	0	-3000		-3	-100	-100	250	.64
BLW	304	10	-300	20	-3000		-3	-100	-100	200	.59
BLW	314	10	-300	-60	-6000		-3	-100	-100	150	1.53
BLW	314	10	-300	0	-3000		-3	-100	-100	300	2.22
BLW	314	10	-300	20	-3000		-3	-100	-100	300	.64
BLW	314	20	-300	-60	BELOW		-3	-100	-100	100	.14
BLW	314	20	-300	-40	-6000		-3	-100	-100	150	.33
BLW	314	20	-300	-40	-6000		-3	-100	-100	200	.35
BLW	325	10	-300	0	-3000		-3	-100	-100	300	..05
BLW	325	10	-300	20	-3000		-3	-100	-100	250	.65

TABLE LXXXIII - Continued

STEADY STATE, GRD CONDITION, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	20	-300	-60	-6000		-3	-100	-100	-100	.15
BLW	325	20	-300	-40	-6000		-3	-100	-100	200	.74
BLW	334	10	-300	-60	-6000		-3	-100	-100	-100	.53
BLW	294	10	-300	-60	-6000		-3				.15
BLW	304	10	-300	-60	-6000		-3				.15
BLW	314	10	-300	-60	-6000		-3				.81
BLW	325	10	-300	-40	-6000		-3				.36
BLW		BLW	-300	0	-3000		-3	-100	-100	-100	4.88
BLW		BLW	-300	20	-3000		-3	-100	-100	-100	.36
BLW		10	-300	0	-3000		-3	-100	-100	-100	.46
BLW		10	-300	0	-3000		-3	-100	-100	150	.15

STEADY STATE, GRD CONDITION, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	150	3.94
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	200	1.47
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	250	.85
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	100	1.99
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	150	4.34
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	150	1.43
BLW	BLW	BLW	-300	20	0		-3	-100	-100	150	4.58
BLW	BLW	10	-300	-60	BELOW		-3	100	-100	150	.79
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	100	1.50
BLW	284	10	-300	-60	BELOW		-3	-100	-100	150	1.47
BLW	314	10	-300	-60	-6000		-3	-100	-100	250	1.57
BLW	314	10	-300	-20	-3000		-3	-100	-100	350	.78
BLW	314	10	-300	0	-3000		-3	-100	-100	300	3.57
BLW	314	10	-300	20	-3000		-3	-100	-100	300	1.16
BLW	314	10	-300	20	-3000		-3	-100	-100	350	.86
BLW	314	10	-300	20	0		-3	-100	-100	300	.41
BLW	314	20	-300	-60	BELOW		-3	-100	-100	250	.59
BLW	325	10	-300	-60	-6000		-3	-100	-100	200	1.32
BLW	325	10	-300	-20	-3000		-3	-100	-100	300	1.15
BLW	325	20	-300	-100	BELOW		-3	-100	-100	-100	.45
BLW	325	20	-300	-80	BELOW		-3	-100	-100	100	2.19
BLW	325	20	-300	-60	BELOW		-3	100	-100	300	.86

STEADY STATE, HOVER, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-20	-3000		-3	-100	-100	-100	.07
BLW	314	20	-300	-20	-3000		-3	100	-100	-100	.09
BLW	314	30	-300	-20	-3000		-3	-100	-100	-100	.17
BLW	314	40	-300	-40	-3000		-3	-100	-100	-100	.17
BLW	325	30	-300	-20	-3000		-3	-100	-100	-100	.67

TABLE LXXXIII - Continued

STEADY STATE, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	284	30	-300	20	0	-3	-150	-100	-100	.08
BLW	284	30	-300	20	0	-3	-100	-100	-100	.62
BLW	284	30	-300	40	0	-3	-100	-100	-100	.15
BLW	294	30	-300	20	0	-3	-100	-100	-100	.08
BLW	314	20	-300	-60	BELOW	-3	-100	-100	-100	.45
BLW	314	20	-300	20	-3000	-3	-150	-100	-100	.05
BLW	314	30	-600	-80	-6000	-3	-100	-100	-100	.09
BLW	314	30	-600	-60	-6000	-3	-100	-100	-100	.09
BLW	314	30	-600	0	0	-3	-100	-100	-100	.09
BLW	314	30	-600	0	0	-3	100	-100	-100	.09
BLW	314	30	-600	0	0	3	-100	-100	-100	.09
BLW	314	30	-300	-80	BELOW	-3	100	-100	-100	.09
BLW	314	30	-300	-80	BELOW	6	-100	-100	-100	.09
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.82
BLW	314	30	-300	-60	-6000	-3	100	-100	-100	.09
BLW	314	30	-300	-60	-6000	3	-100	-100	-100	.09
BLW	314	30	-300	-60	-3000	-3	-100	-100	-150	.09
BLW	314	30	-300	-40	-6000	-3	-100	-100	-100	.66
BLW	314	30	-300	-20	-6000	-3	100	-100	-100	.09
BLW	314	30	-300	-20	-3000	-9	-100	-100	-100	.02
BLW	314	30	-300	-20	-3000	-3	-100	-100	-100	.17
BLW	314	30	-300	0	-3000	-9	-100	-100	-100	.02
BLW	314	30	-300	0	-3000	-6	-100	-100	-100	.53
BLW	314	30	-300	0	-3000	-3	-100	-100	-100	1.73
BLW	314	30	-300	0	-3000	3	-100	-100	-100	.23
BLW	314	30	-300	0	0	-6	-100	100	-100	.09
BLW	314	30	-300	0	0	-3	-100	-100	-100	.17
BLW	314	30	-300	20	-3000	-3	-100	-100	-100	.15
BLW	314	40	-600	-60	-6000	-3	-100	-100	-100	.09
BLW	314	40	-300	-60	-3000	-3	-100	-100	-150	.05
BLW	325	20	-900	-20	-3000	-3	-100	-100	-100	.05
BLW	325	20	-300	-20	-6000	-3	-100	-100	-100	.43
BLW	325	30	-900	-20	-3000	-3	-100	-100	-100	.05
BLW	325	30	-300	-80	BELOW	-3	-100	-100	-100	.09
BLW	325	30	-300	-60	BELOW	-3	-100	-100	-100	.32
BLW	325	30	-300	-60	BELOW	-3	100	-100	-100	.09
BLW	325	30	-300	-60	-6000	-3	-100	-100	-100	.18
BLW	325	30	-300	-40	-6000	-3	-100	-100	-100	.14
BLW	325	30	-300	-40	-6000	-3	100	-100	-100	.09
BLW	325	30	-300	-20	-6000	-3	-100	-100	-100	.14
BLW	325	30	-300	-20	-6000	-3	100	-100	-100	.52
BLW	325	30	-300	-20	-3000	-3	-100	-100	-100	.57
BLW	325	30	-300	0	-3000	-3	-100	-100	-100	.08
BLW	334	20	-300	-40	-6000	-3	-100	-100	-100	.67
BLW	334	20	-300	-20	-6000	-3	-100	-100	-100	.05
BLW	334	20	-300	-20	-6000	-3	100	-100	-100	.26
BLW	334	30	-300	-40	-6000	-3	-100	-100	-100	.34
BLW	334	30	-300	-40	-6000	-3	100	-100	-100	.29
BLW	334	30	-300	-20	-6000	-3	-100	-100	-100	.64
BLW	334	30	-300	-20	-6000	-3	100	-100	-100	.10
40	334	20	-300	-20	-6000	-3	100	-100	-100	.59
BLW	314	30	-300	-80	BELOW	-3				.10
BLW	314	30	-300	-80	BELOW	-3				.05

TABLE LXXXIII - Continued

STEADY STATE, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	30	-300	20	-3000		-9	-100	-100	-100	.01
BLW	304	30	-300	20	-3000		-6	-100	-100	-100	.06
BLW	304	30	-300	20	-3000		-3	-100	-100	-100	.59
BLW	314	20	-900	0	-3000		-3	-100	-100	-100	.05
BLW	314	20	-600	0	-3000		-3	100	-100	100	.25
BLW	314	20	-300	-40	-6000		-3	-100	-100	-100	.09
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.83
BLW	314	20	-300	0	-3000		3	-100	-100	-100	.14
BLW	314	20	-300	20	0		-9	-150	-100	-100	.05
BLW	314	20	-300	20	0		-6	-100	-100	-100	.08
BLW	314	20	-300	20	0		-3	-100	-100	-100	1.05
BLW	314	20	-300	20	0		-3	100	-100	-100	.08
BLW	314	30	-600	0	-3000		-3	-100	-100	-100	.02
BLW	314	30	-300	-80	BELOW		-12	-100	-100	-100	.02
BLW	314	30	-300	-80	BELOW		-3	-100	-100	-100	1.09
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	2.22
BLW	314	30	-300	-60	-6000		-3	100	-100	-100	.52
BLW	314	30	-300	-40	-6000		-3	-100	-100	-100	.74
BLW	314	30	-300	0	-3000		-6	100	-100	-100	.17
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	1.43
BLW	314	30	-300	0	-3000		-3	100	-100	-100	.76
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.09
BLW	314	30	-300	0	0		-6	-100	-100	-100	.03
BLW	314	30	-300	0	0		-3	-100	-100	-100	.32
BLW	314	30	-300	20	-3000		-3	-100	-100	-100	.26
BLW	314	30	-300	20	0		-6	-100	-100	-100	.05
BLW	314	30	-300	20	0		-3	-100	-100	-100	1.08
BLW	314	30	-300	20	0		-3	100	-100	-100	.08
BLW	314	30	-300	20	0		3	-100	-100	-100	.07
BLW	314	30	300	-40	-6000		-3	-100	-100	-100	.14
BLW	314	30	300	20	-3000		-6	-100	-100	-100	.07
BLW	314	30	300	20	-3000		-3	-100	-100	-100	.07
BLW	314	40	-600	-20	-6000		-3	200	-100	-100	.12
BLW	314	40	-300	-80	BELOW		-3	-100	-100	-100	.26
BLW	314	40	-300	-60	BELOW		-3	-100	-100	-100	.55
BLW	314	40	-300	-60	-6000		-3	-100	-100	-100	.17
BLW	314	40	-300	-20	-6000		-3	100	-100	-100	.16
BLW	314	40	-300	-20	-6000		-3	150	-100	-100	.28
BLW	314	60	600	-20	-6000		-3	-100	-100	-100	.03
BLW	314	60	600	-20	-6000		3	-100	-100	-100	.07
BLW	325	20	-300	0	-3000		-6	-100	-100	-100	.09
BLW	325	20	-300	0	-3000		-3	-100	-100	-100	.69
BLW	325	20	-300	0	-3000		6	-100	-100	-100	.09
BLW	325	20	-300	0	0		-3	-100	-100	-100	.08
BLW	325	20	-300	20	0		-3	-100	-100	-100	.25
BLW	325	20	-300	20	0		6	-100	-100	-100	.03
BLW	325	20	300	20	-3000		-3	-100	-100	-100	.06
BLW	325	30	-300	-40	-6000		-3	-100	-100	-100	.48
BLW	325	30	-300	-20	-3000		-3	-100	-100	-100	.09
BLW	325	30	-300	-20	-3000		3	-100	-100	-100	.03
BLW	325	30	-300	0	-3000		-15	-100	-100	-100	.03
BLW	325	30	-300	0	-3000		-6	-100	-100	-100	.21
BLW	325	30	-300	0	-3000		-3	-100	-100	-100	.91
BLW	325	30	-300	0	-3000		3	-100	-100	-100	.09
BLW	325	30	-300	0	0		-3	-100	-100	-100	.08
BLW	325	30	-300	20	0		-6	-100	-100	-100	.14

TABLE LXXXIII - Continued

STEADY STATE, HOVER, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	30	-300	20	0		3	-100	-100	-100	.14
BLW	325	40	-300	-60	-6000		-3	-100	-100	-100	.09
BLW	334	40	-300	-60	-6000		-6	-100	-100	-100	.02
BLW	334	40	-300	-60	-6000		-3	-100	-100	-100	.17
40	314	40	-300	-20	-6000		-3	100	-100	-100	.10
40	325	50	600	-20	-6000		-6	-100	-100	-100	.07
BLW	314	30	-300	-60	-6000		-3				.22
BLW	314	40	-300	-40	-6000		3				.09
BLW	314	40	-300	-40	-6000		12				.02
BLW		30	-300	0	-3000		-3	-100	-100	-100	.12
BLW		30	-300	0	-3000		-6	-100	-100	-100	.09
BLW		30	-300	0	-3000		-3	-100	-100	-100	.61
BLW		30	-300	0	-3000		3	-100	-100	-100	.09

STEADY STATE, HOVER, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-20	-3000		-3	-100	-100	-100	.50
BLW	314	30	-300	0	-3000		-6	-100	-100	-100	.07
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	1.55
BLW	314	30	-300	0	-3000		-3	100	-100	-100	.36
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.10
BLW	314	30	-300	20	-3000		-3	-100	-100	-100	.26
BLW	314	30	-300	20	-3000		3	-100	-100	-100	.09
BLW	314	30	-300	20	0		-3	-100	-100	-100	.10
BLW	314	30	300	20	-3000		-3	-100	-100	-100	.22
BLW	314	40	-300	-60	BELOW		-3	-100	-100	-100	.34
BLW	314	40	300	-60	BELOW		-3	-100	-100	-100	.07
BLW	314	40	300	-60	-6000		-3	-100	-100	-100	.09
BLW	325	30	-300	-80	BELOW		-3	-100	-100	-100	.25
BLW	325	30	-300	0	-3000		-3	-100	-100	-100	.77
BLW	325	30	-300	20	-3000		-3	-100	-100	-100	.08
BLW	325	30	-300	20	-3000		3	-100	-100	-100	.07
BLW	325	40	-300	-80	BELOW		-3	-100	-100	-100	.54
BLW	325	40	-300	-80	BELOW		3	-100	-100	-100	.02
BLW	325	40	-300	-60	BELOW		-3	-100	-100	-100	.17
BLW	325	40	-300	-40	-6000		-3	-100	-100	-100	.43
BLW	325	50	-300	-60	BELOW		-3	-100	-100	-100	.40
BLW	325	50	-300	-40	BELOW		-3	-100	-100	-100	.17

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	40	900	-40	-3000	-3	-100	-100	-100	.10
40	314	40	900	-60	-6000	-3	100	-100	-100	.10
40	314	40	900	-40	-3000	-3	-100	-100	-100	.12
60	314	40	900	-60	-6000	-3	-100	-100	-100	.10
70	314	40	900	-80	-6000	-3	-100	-100	-100	.16
70	314	40	900	-60	-6000	-3	-100	-100	-100	.13
75	314	40	900	-80	-6000	-3	-100	-100	-100	.16
80	314	40	900	-80	-6000	-3	-100	100	-100	.09
80	334	30	300	-40	-6000	-3	100	-100	100	.13
85	314	30	600	-20	-3000	-3	-100	-100	-100	.09
90	314	30	600	-20	-3000	-3	-100	-100	-100	.21
90	314	30	600	-20	-3000	-3	100	-100	-100	.05
90	334	30	300	-40	-6000	-3	100	-100	100	.13
95	314	30	300	-20	0	-3	-100	-100	-150	.05
95	325	30	300	-20	-3000	-3	100	-100	-100	.60
100	314	30	300	-20	-3000	-3	-100	-100	-100	.17
100	325	30	300	-20	-3000	-3	100	-100	-100	1.12
105	314	30	300	-20	-3000	-6	-100	-100	-100	.04
105	314	30	300	-20	-3000	-3	-100	-100	-100	.17
105	314	30	300	-20	-3000	3	-100	-100	-100	.04
105	325	30	300	-20	-3000	-3	100	-100	-100	.09
110	314	30	300	-20	-3000	-9	-100	-100	-100	.04
110	314	30	300	-20	-3000	-6	-100	-100	-100	.04
110	314	30	300	-20	-3000	-3	-100	-100	-100	.83
110	314	30	300	-20	-3000	3	-100	-100	-100	.04
110	325	30	300	-20	-3000	-3	100	-100	-100	.14
115	314	30	300	-20	-3000	-3	-100	-100	-100	.09
120	314	30	300	-20	-3000	-9	-100	100	-100	.04

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	-3000	-3	100	-100	-100	.37
BLW	314	30	-300	0	0	3	-100	100	-100	.19
BLW	314	30	300	-60	-6000	-3	-100	-100	-100	.75
BLW	314	30	300	-40	-3000	-3	-100	-100	-100	.69
BLW	314	30	300	0	-3000	-3	-150	-100	-100	.02
BLW	314	30	300	0	-3000	3	-100	-100	-100	.18
BLW	314	30	300	20	-3000	3	-100	-100	-100	.23
BLW	314	40	300	-60	-6000	-3	100	-100	-100	.11
BLW	314	40	300	-60	-6000	3	100	-100	-100	.11
BLW	314	40	600	-60	-6000	-3	-100	-100	-100	.11
BLW	314	40	900	20	0	3	-100	-100	-100	.09
BLW	325	20	300	-20	-3000	6	100	-100	-100	.09
BLW	325	30	-300	0	-3000	-3	150	-100	-100	.08
BLW	325	30	300	-20	-3000	3	100	-100	-100	.05
BLW	325	30	300	-20	-3000	6	100	-100	-100	.10
BLW	325	30	300	20	-3000	-3	-100	-100	-100	.05
BLW	325	30	600	-60	-6000	6	100	-100	-100	.06
BLW	325	40	600	0	-3000	-3	-100	-100	-100	.09
BLW	325	40	600	0	-3000	9	-100	-100	-100	.03
BLW	334	30	-300	-40	-6000	3	100	-100	-100	.15
BLW	334	40	300	-20	-3000	3	-100	-100	-100	.09
40	314	20	-300	-20	0	-3	-100	100	-100	.34
40	314	30	-300	0	-3000	-3	100	-100	-100	.22
40	314	30	-300	0	-3000	3	150	-100	-100	.12
40	314	30	-300	0	0	6	-100	-100	-100	.05
40	314	30	300	-60	-6000	3	-100	-100	-100	.18
40	314	30	300	0	-3000	3	-150	-100	-100	.18
40	314	30	300	20	-3000	3	-100	-100	-100	.23
40	314	30	600	0	3000	-3	-100	-100	-100	.44
40	314	40	300	-60	-6000	6	-100	-100	-100	.09
40	314	40	600	-60	-6000	-3	-100	-100	-100	.17
40	314	40	600	-60	-6000	3	-100	-100	-100	.25
40	314	40	600	-40	-6000	3	-100	-100	-100	.11
40	314	40	600	-40	-6000	12	100	-100	-100	.05
40	314	40	900	20	0	3	-100	-100	-100	.12
40	325	30	300	-20	-3000	3	100	-100	-100	.10
40	325	30	300	-20	-3000	6	100	-100	-100	.04
40	325	30	600	-60	-6000	6	100	-100	-100	.06
40	325	30	600	-20	-3000	3	100	-100	-100	.04
40	325	30	600	0	-3000	3	100	-100	-100	.09
40	325	30	600	0	6000	-3	-100	-100	-100	.16
40	334	30	300	-40	-6000	3	100	-100	-100	.14
40	334	30	300	-20	-3000	3	-100	-100	-100	.09
60	314	20	-300	-40	-3000	-3	-100	-100	-100	0.00
60	314	20	-300	-20	0	-3	-100	100	-100	.10
60	314	20	300	20	-3000	-3	-100	-100	100	.11
60	314	30	-300	-60	-6000	-3	-100	-100	-100	.25
60	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
60	314	30	-300	-40	-3000	3	-100	-100	-100	.05
60	314	30	-300	0	-3000	-3	150	-100	-100	.31
60	314	30	-300	0	0	6	-100	100	-100	.05
60	314	30	300	-60	-6000	3	-100	-100	-100	.18
60	314	30	300	-20	-3000	-3	150	-100	-100	.10
60	314	30	300	20	0	-3	-100	-100	-100	.15
60	314	30	600	0	3000	-3	-100	-100	-150	.13
60	314	30	600	0	3000	-3	-100	-100	-100	.60
60	314	40	300	-60	-6000	-3	-100	-100	-100	.13

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB. (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	40	600	-60	-6000	-3	-100	-100	-100	.09
60	314	40	600	-60	-6000	3	-100	-100	-100	.17
60	314	40	600	-40	-6000	3	-100	-100	-100	.11
60	314	40	900	20	0	3	-100	-100	-100	.12
60	325	20	-300	-20	0	-3	-100	100	-100	1.44
60	325	20	-300	-20	0	3	-100	100	-100	.03
60	325	30	-300	-20	-6000	3	100	-100	-100	.15
60	325	30	300	-20	-3000	3	100	-100	-100	.10
60	325	30	300	20	-3000	-3	-100	-100	-100	.62
60	325	30	300	20	0	-3	100	-100	-100	.18
60	325	30	600	-20	-3000	3	100	-100	-100	.04
60	325	40	300	-20	-3000	3	100	-100	-100	.04
60	325	40	600	-60	-6000	3	100	-100	-100	.10
60	334	30	300	-40	-6000	-3	100	-100	-100	.07
70	294	20	300	20	-3000	-3	100	-100	-100	.05
70	304	20	300	20	0	-3	100	-100	-100	.05
70	304	30	300	20	0	-3	100	-100	-100	.04
70	314	20	-300	-20	-3000	-3	-100	100	-100	.12
70	314	20	-300	-20	0	-3	-100	100	-100	.30
70	314	20	-300	-20	0	3	-100	100	-100	.07
70	314	20	300	20	0	-3	100	-100	-100	.05
70	314	30	-300	-60	-6000	-3	-100	-100	-100	.11
70	314	30	-300	0	-3000	-3	150	-100	-100	.12
70	314	30	-300	0	0	3	-100	100	-100	.03
70	314	30	300	-20	-3000	3	150	-100	-100	.04
70	314	30	300	-20	0	-3	-100	-100	-100	.43
70	314	30	300	0	-3000	-3	-200	-100	-100	.12
70	314	30	300	0	0	-3	-100	-100	-100	.03
70	314	30	300	20	0	-3	100	-100	-100	.04
70	314	30	600	0	3000	-3	-100	-100	-100	.13
70	314	40	600	-80	BELOW	-3	100	-100	-100	.12
70	314	40	600	-60	-6000	-3	-100	100	-100	.09
70	314	40	900	20	0	-3	-100	-100	-100	.29
70	325	20	-300	-20	-3000	-3	-100	100	-100	.09
70	325	20	-300	-20	-3000	-3	100	100	-100	.14
70	325	20	-300	-20	-3000	3	-100	100	-100	.05
70	325	20	-300	-20	0	-3	-100	100	-100	.82
70	325	20	-300	-20	0	3	-100	100	-100	.03
70	325	20	-300	-20	0	3	-100	150	-100	.05
70	325	30	-300	-20	0	-3	-100	100	-100	.29
70	325	30	300	20	0	-3	100	-100	-100	.38
70	325	40	300	-20	-3000	3	100	-100	-150	.04
70	334	30	300	-40	-6000	-3	100	-100	-100	.07
70	334	30	300	-20	-3000	-3	-100	-100	-100	.19
70	334	40	300	-20	-3000	-3	-100	-100	-100	.13
75	314	20	-300	-20	-3000	-3	-100	100	-100	.05
75	314	20	-300	-20	0	-3	-100	100	-100	.20
75	314	20	-300	-20	0	-3	-100	150	-100	.19
75	314	30	-300	-60	-6000	-3	-100	-100	-100	.44
75	314	30	-300	-40	-3000	-3	-100	-100	-100	.17
75	314	30	-300	-40	-3000	3	-100	-100	-100	.05
75	314	30	-300	-20	0	-3	-100	100	-100	.12
75	314	30	-300	0	-3000	-3	150	-100	-100	.12
75	314	30	-300	0	0	3	-100	100	-100	.03
75	314	30	300	-20	-3000	-3	-200	-100	-100	.28
75	314	30	300	-20	-3000	-3	-150	-100	-100	.24
75	314	30	300	-20	-3000	-3	-100	-100	-100	.04

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
75	314	30	300	-20	-3000	-3	100	-100	-100	.17
75	314	30	300	-20	-3000	3	100	-100	-100	.04
75	314	30	300	-20	0	-3	-150	-100	-100	.30
75	314	30	300	0	-3000	-3	-200	-100	-100	.55
75	314	30	300	20	0	-3	-100	-100	-100	.08
75	314	30	600	-20	3000	-3	-100	-100	-100	.31
75	314	30	600	0	3000	-3	-100	-100	-150	.13
75	314	40	300	-60	-6000	-3	-100	-100	-100	.13
75	314	40	600	-80	BELOW	-3	150	-100	-100	.09
75	314	40	600	-60	-6000	-3	-100	-100	-100	.17
75	314	40	600	-40	-6000	3	-100	-100	-100	.09
75	314	40	900	20	0	-3	100	-100	-100	.23
75	325	20	-300	-20	-3000	-3	-100	-100	-100	.05
75	325	20	-300	-20	-3000	-3	-100	100	-100	.8C
75	325	20	-300	-20	0	-6	-100	150	-100	.0[illegible]
75	325	20	-300	-20	0	-3	-100	100	-100	.40
75	325	20	-300	-20	0	-3	-100	150	-100	.12
75	325	30	-300	-20	0	-3	-100	100	-100	.38
75	325	30	-300	-20	0	3	-100	100	-100	.03
75	325	30	-300	0	-3000	-3	150	-100	-100	.31
75	325	30	300	-20	-3000	3	100	-100	-100	.04
75	325	30	600	-20	-3000	-3	-100	-100	-100	0.00
75	325	30	600	-20	-3000	3	-100	-100	-100	.04
75	325	40	300	-20	-3000	15	100	-100	-150	.00
75	325	40	600	-60	-6000	3	100	-100	-100	.10
75	334	30	300	-40	-6000	-3	100	-100	-100	.26
80	314	20	-300	-20	-3000	-3	-100	100	-100	.17
80	314	20	-300	-20	0	-3	-100	100	-100	.14
80	314	20	-300	-20	0	-3	-100	150	-100	.03
80	314	30	-300	-40	-3000	-3	-100	-100	-100	.38
80	314	30	-300	-20	0	-3	-100	100	-100	.12
80	314	30	-300	0	-3000	-3	-100	100	-100	.03
80	31	30	-300	0	-3000	-3	150	-100	-100	.33
80	314	30	-300	0	0	-3	-100	100	-100	.07
80	314	30	300	-60	-6000	-3	-100	-100	-100	.12
80	314	30	300	-40	-3000	-3	-100	100	-100	.35
80	314	30	300	-20	-3000	-3	-200	-100	-100	1.03
80	314	30	300	-20	-3000	-3	-150	-100	-100	.49
80	314	30	300	-20	-3000	-3	-100	-100	-100	.04
80	314	30	300	-20	-3000	-3	100	-100	-100	.09
80	314	30	300	-20	0	-3	-150	-100	-100	.55
80	314	30	300	-20	0	-3	-150	-100	100	.49
80	314	30	300	-20	0	-3	100	-100	-100	.26
80	314	30	300	0	-3000	-3	-200	-100	-100	.10
80	314	30	300	0	-3000	-3	-150	-100	-100	.18
80	314	30	600	-20	0	-3	-100	-100	-150	.13
80	314	30	600	-20	0	-3	-100	-100	-100	.25
80	314	30	600	0	3000	-3	-100	-100	-150	.98
80	314	40	600	-80	BELOW	-3	100	-100	-150	.17
80	314	40	600	-60	-6000	-3	-100	-100	-100	.09
80	314	40	600	-60	-6000	-3	-100	100	-100	.09
80	314	40	600	-60	-6000	3	-100	-100	-100	.04
80	325	20	-300	-20	-3000	-3	-100	100	-100	1.05
80	325	20	-300	-20	-3000	-3	100	100	-100	.10
80	325	20	-300	-20	-3000	3	100	100	-100	.07
80	325	20	-300	-20	0	-3	-100	100	-100	.96

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	325	20	-300	-20	0	3	-100	100	-100	.05
80	325	20	-300	0	-3000	-3	-100	100	-100	.26
80	325	30	-300	-20	-6000	-3	150	-100	-100	.16
80	325	30	-300	-20	0	-3	-100	100	-100	.33
80	325	30	-300	0	-3000	-3	-100	-100	-100	.19
80	325	30	-300	0	-3000	-3	100	100	-100	.10
80	325	30	300	-20	-3000	-3	-100	-100	-100	.39
80	325	30	300	-20	-3000	3	-100	-100	-100	.07
80	325	30	300	-20	-3000	3	100	-100	-100	.04
80	325	30	600	-20	-3000	3	-100	-100	-100	.04
80	325	40	300	-20	-3000	15	100	-100	-150	.00
85	314	20	-300	-20	-3000	-6	-100	100	-100	.03
85	314	20	-300	-20	-3000	-3	-100	100	-100	.12
85	314	20	-300	-20	-3000	-3	100	100	-100	.07
85	314	30	-300	0	-3000	-3	100	100	-100	.19
85	314	30	300	-40	-3000	-3	-100	100	-100	.53
85	314	30	300	-20	-3000	-3	-200	-100	-100	.51
85	314	30	300	-20	-3000	-3	-100	-100	-100	.13
85	314	30	300	-20	-3000	-3	100	-100	-100	.40
85	314	30	300	-20	0	-3	-200	-100	-100	.56
85	314	30	300	-20	0	-3	-150	-100	-100	.36
85	314	30	300	-20	0	-3	100	-100	-100	.09
85	314	30	300	0	-3000	-3	-150	-100	-100	.15
85	314	30	600	-40	0	-3	-100	-100	-150	.18
85	314	30	600	-20	0	-3	-100	-100	-150	.13
85	314	30	600	0	3000	-3	-100	-100	-150	.18
85	314	40	-300	-40	-3000	-3	-100	-100	-100	.26
85	314	40	600	-60	-6000	-3	-100	-100	-100	.26
85	314	40	600	-60	-6000	-3	-100	100	-100	.17
85	325	20	-300	-20	-3000	-9	100	100	-100	.02
85	325	20	-300	-20	-3000	-6	100	100	-100	.06
85	325	20	-300	-20	-3000	-3	-100	100	-100	.88
85	325	20	-300	-20	-3000	-3	100	100	-100	.38
85	325	20	-300	-20	-3000	3	100	100	-100	.12
85	325	20	-300	-20	0	-3	-100	100	-100	.33
85	325	20	-300	0	-3000	-3	100	100	-100	.15
85	325	30	-300	-80	BELOW	-3	-100	-100	-100	.36
85	325	30	-300	-20	-3000	-3	100	100	-100	.13
85	325	30	-300	-20	0	-6	-100	100	-100	.03
85	325	30	-300	0	-3000	-3	100	-100	-100	.14
85	325	30	-300	0	-3000	-3	150	-100	-100	.25
85	325	30	-300	0	-3000	-3	150	100	-100	.35
85	325	30	300	-20	-3000	-3	-100	-100	-100	.43
85	325	30	300	-20	-3000	-3	-100	100	-100	.81
85	325	30	300	-20	-3000	3	100	-100	-150	.04
85	325	30	300	-20	-3000	3	100	-100	-100	.04
85	325	40	-300	-80	BELOW	-3	-100	-100	-100	1.06
85	325	40	600	-80	-6000	-3	-100	-100	-100	.11
85	325	40	600	-60	-6000	-3	100	-100	-100	.42
90	314	20	-300	-20	-3000	-6	-100	100	-100	.07
90	314	20	-300	-20	-3000	-3	-100	100	-100	.07
90	314	30	-300	-40	-3000	-3	-100	-100	-100	.29
90	314	30	-300	-20	-3000	-3	100	-100	-100	.09
90	314	30	-300	-20	-3000	-3	100	100	-100	.12
90	314	30	300	-40	-3000	-3	-100	100	-100	.50
90	314	30	300	-20	-3000	-3	-200	-100	-100	.56

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
90	314	30	300	-20	-3000	-3	-150	-100	-100	.12
90	314	30	300	-20	-3000	-3	-100	-100	-100	.13
90	314	30	300	-20	-3000	-3	100	-100	-100	.26
90	314	30	300	-20	-3000	3	100	-100	-100	.04
90	314	30	300	-20	0	-6	-100	-100	-100	.13
90	314	30	300	-20	0	-3	-100	-100	-100	.13
90	314	30	600	-60	-6000	-3	-100	100	-100	.09
90	314	30	600	0	3000	-3	-100	-100	-150	.13
90	314	40	-300	-60	-3000	-3	-100	-100	-100	.17
90	314	40	-300	-40	-3000	-3	-100	-100	-100	.17
90	314	40	300	-60	-6000	-3	-100	-100	-100	.70
90	314	40	300	-40	-3000	-3	-100	-100	-100	2.07
90	314	40	300	-40	-3000	-3	-100	100	-100	.24
90	314	40	600	-80	BELOW	-3	100	-100	-150	.17
90	314	40	600	-80	-6000	-3	-100	-100	-100	.42
90	314	40	600	-60	-3000	-3	-100	100	-100	.09
90	314	40	600	-40	-3000	-3	-100	-100	-100	.26
90	314	40	600	-40	0	-3	-100	100	-150	.09
90	314	50	600	-60	-6000	-3	-100	-100	-100	.09
90	325	20	-300	-20	-3000	-9	100	100	-100	.02
90	325	20	-300	-20	-3000	-6	-100	100	-100	.03
90	325	20	-300	-20	-3000	-6	100	100	-100	.03
90	325	20	-300	-20	-3000	-3	-100	100	-100	.16
90	325	20	-300	-20	-3000	-3	100	100	-100	.28
90	325	20	-300	0	-3000	-3	100	100	-100	.06
90	325	30	-300	-20	-3000	-6	100	100	-100	.03
90	325	30	-300	-20	-3000	-3	100	100	-100	.08
90	325	30	-300	0	-3000	-3	150	-100	-100	.25
90	325	30	-300	0	-3000	-3	150	100	-100	.35
90	325	30	300	-20	-3000	-3	-100	-100	-100	.26
90	325	30	300	-20	-3000	-3	-100	100	-100	.22
90	325	30	300	-20	-3000	-3	100	-100	-250	.09
90	325	30	300	-20	-3000	3	100	-100	-100	.03
90	325	30	600	-20	-3000	-3	-100	-100	-100	.05
90	325	30	600	-20	3000	-3	-100	-100	-200	.53
90	325	40	-300	-100	BELOW	-3	100	-100	-100	.16
90	325	40	-300	-80	BELOW	-3	100	-100	-100	1.36
90	325	40	600	-80	-6000	-3	-100	-100	-100	.35
90	325	40	600	-80	-6000	-3	100	-100	-100	.90
90	325	40	600	-60	-6000	-3	100	-100	-100	.23
95	314	30	-300	-20	-3000	-6	100	100	-100	.03
95	314	30	300	-20	-3000	-6	100	-100	-100	.10
95	314	30	300	-20	-3000	-3	100	-100	-100	.42
95	314	30	300	-20	-3000	3	100	-100	-100	.04
95	314	30	600	-80	-6000	-3	-100	-100	-100	.18
95	314	30	600	-60	-3000	-3	-100	100	-100	.07
95	314	30	600	-20	3000	-3	-100	100	-200	.09
95	314	30	600	0	3000	-3	-100	-100	-150	.13
95	314	40	-300	-60	-3000	-3	-100	-100	-100	.09
95	314	40	300	-60	-6000	-3	-100	-100	-100	.07
95	314	40	300	-40	-3000	-3	-100	-100	-100	.47
95	314	40	600	-80	-6000	-3	-100	-100	-100	.67
95	314	40	600	-60	-6000	-3	-100	-100	-100	.17
95	314	40	600	-40	-3000	-3	-100	-100	-100	.64
95	314	50	600	-40	-6000	-3	-100	-100	-100	.17
95	325	30	-300	-20	-6000	-3	100	-100	-100	.16
95	325	30	-300	-20	-3000	-3	100	100	-100	.04

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	30	-300	-20	0		-3	-100	-100	-100	1.14
95	325	30	-300	-20	0		-3	-100	100	-100	.22
95	325	30	-300	0	-3000		-3	150	-100	-100	.36
95	325	30	300	-20	-3000		-3	-100	-100	-100	.09
95	325	40	600	-80	-6000		-3	-100	-100	-100	.02
95	325	40	600	-80	-6000		-3	100	-100	-100	.57
100	314	30	-300	-20	-3000		-3	100	100	-100	.09
100	314	30	-300	0	-3000		-3	100	-100	-100	.20
100	314	30	-300	0	-3000		-3	150	-100	-100	.86
100	314	30	-300	0	0		-3	150	-100	-100	.33
100	314	30	300	-20	-3000		-6	100	-100	-100	.04
100	314	30	300	-20	-3000		-3	-100	-100	-100	.09
100	314	30	300	-20	-3000		-3	100	-100	-100	.04
100	314	30	300	-20	0		-3	-100	-100	-100	.13
100	314	30	300	-20	0		-3	-100	100	-100	.34
100	314	40	-300	-60	-3000		-3	-100	-100	-100	.40
100	314	40	600	-80	BELOW		-3	100	-100	-100	.09
100	314	40	600	-80	BELOW		-3	150	-100	-100	.03
100	314	40	600	-60	-6000		-3	100	-100	-100	.05
100	314	40	600	-60	-3000		-3	-100	-100	-100	1.44
100	314	40	600	-40	-3000		-3	-100	-100	-100	.22
100	314	40	600	-40	-3000		-3	100	-100	-100	.17
100	314	50	600	-40	-3000		-3	100	-100	-100	.17
100	325	30	-300	-20	0		-3	-100	100	-100	.26
105	304	30	300	-20	0		-3	-100	-100	-100	.09
105	314	30	-300	0	-3000		-3	150	-100	-100	1.00
105	314	30	300	-20	-3000		-6	100	-100	-100	.04
105	314	30	300	-20	-3000		-3	100	-100	-100	.26
105	314	30	300	-20	0		-6	-100	-100	-100	.13
105	314	30	300	-20	0		-3	-100	-100	-150	.26
105	314	30	300	-20	0		-3	-100	-100	-100	.09
105	314	30	600	-20	-6000		-3	100	100	-150	.10
105	314	40	600	-40	-3000		-3	100	-100	-100	.21
105	314	50	600	-60	-3000		-3	100	-100	-100	.62
105	314	50	600	-40	-3000		-3	100	-100	-100	.17
110	314	30	300	-20	-3000		-3	-100	-100	-100	.09
110	314	30	300	-20	-3000		-3	100	-100	-100	10
110	314	30	600	-20	-6000		-3	100	-100	-150	.16
110	314	50	600	-40	-3000		-3	100	-100	-100	.09
80	314	40	300	-80	-3000		-3				.14
80	314	40	300	-80	-3000		3				.06
85	314	30	300	-60	-3000		-3				.06
85	314	40	300	-80	-6000		-3				.08
90	314	30	300	-60	-3000		-3				.06
90	314	30	300	-20	0		3				.16
90	314	30	300	-20	0		6				.03
90	314	40	300	-80	-3000		-3				.34
90	314	40	300	-80	-3000		3				.06
95	314	30	-300	-40	-3000		-3				.14
95	314	30	300	-80	-3000		-3				.09
95	314	30	300	-80	-3000		-3				.34
95	314	30	300	-80	-3000		3				.03
95	314	30	300	-60	-3000		-6				.07
95	314	30	300	-60	-3000		-3				.06
95	314	30	300	-20	0		-6				.12
95	314	30	300	-20	0		6				.03
95	314	40	300	-80	-6000		-3				.29

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	40	300	-80	-3000	-3				.27
100	314	30	-300	-40	-3000	-3				.17
100	314	30	-300	-40	-3000	-3				.09
100	314	30	-300	-40	-3000	3				.05
100	314	30	300	-80	-3000	-3				.20
100	314	30	300	-80	-3000	3				.03
100	314	30	300	-60	-3000	-3				.13
100	314	30	300	-40	0	-3				.16
100	314	30	300	-20	0	-6				.12
100	314	30	300	-20	0	3				.16
100	314	40	300	-80	-6000	-3				.25
100	314	40	300	-80	-3000	-6				.05
100	314	40	300	-80	-3000	-6				.07
100	314	40	300	-80	-3000	-3				.05
100	314	40	300	-80	-3000	-3				.32
100	314	40	300	-80	-3000	9				.02
100	314	40	300	-60	-6000	-3				.47
100	314	40	300	-40	-3000	-3				.26
100	314	40	300	-40	0	-3				.12
105	314	30	-300	-40	-3000	-6				.12
105	314	30	-300	-40	-3000	-3				.66
105	314	30	300	-80	-3000	9				.02
105	314	30	300	-60	-3000	-6				.12
105	314	30	300	-60	-3000	-3				.07
105	314	30	300	-40	0	-3				.16
105	314	40	300	-80	-3000	-6				.07
105	314	40	300	-80	-3000	-3				.24
105	314	40	300	-80	-3000	-3				.22
105	314	40	300	-40	-3000	-3				.90
105	314	40	300	-40	-3000	-3				.90
105	314	40	300	-40	0	-3				.09
110	314	30	-300	-40	-3000	-6				.04
110	314	30	-300	-40	-3000	-3				.28
110	314	30	-300	-40	-3000	3				.05
110	314	30	300	-80	-3000	-3				.28
110	314	30	300	-80	-3000	-3				.21
110	314	30	300	-80	-3000	-3				.05
11C	314	30	300	-60	-3000	-6				.05
110	314	30	300	-20	0	-3				.21
110	314	40	300	-80	-3000	-3				.07
110	314	40	300	-80	-3000	-3				.18
110	314	40	300	-40	0	-3				.09
115	314	30	-300	-40	-3000	-6				.08
115	314	30	-300	-40	-3000	-3				.21
115	314	40	300	-80	-3000	-3				.07
115	314	40	300	-80	-3000	-3				.04

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB

VFL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	40	600	20	-3000		-3	-100	-100	-100	.04
BLW	314	20	300	0	-3000		3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000		6	100	-100	-100	.08
BLW	314	30	-300	20	0		6	-100	-100	-100	.08
BLW	314	30	300	0	-3000		3	-100	-100	-100	.14
BLW	314	40	300	-60	-6000		-3	-100	-100	-100	.09
BLW	314	40	300	-60	-6000		3	100	-100	-100	.10
BLW	314	40	300	20	-3000		-3	-100	-100	-100	.07
BLW	314	40	300	20	-3000		3	-100	-100	-100	.01
BLW	314	40	300	20	-3000		6	-100	-100	-100	.07
BLW	325	30	300	-20	-3000		3	100	-100	-100	.14
BLW	325	30	300	0	-3000		3	100	-100	-100	.17
BLW	325	40	300	-60	-6000		3	-100	-100	-100	.07
BLW	334	40	300	-60	-6000		-3	-100	-100	-100	.09
BLW	334	40	300	-60	-6000		3	100	-100	-100	.17
40	304	40	600	20	-3000		6	-100	-100	-100	.03
40	304	50	600	20	-3000		-3	100	-100	-100	.13
40	314	20	-300	20	0		-3	-100	-100	-100	.25
40	314	20	-300	40	0		-3	100	-100	-100	.06
40	314	20	300	0	-3000		-3	-100	-100	-100	.08
40	314	20	300	0	-3000		3	-100	-100	-100	.08
40	314	20	300	20	0		-3	100	-100	-100	.42
40	314	20	600	0	0		-3	100	-100	-100	.14
40	314	30	-300	0	-3000		-3	150	-100	-100	.21
40	314	30	-300	20	0		-3	-100	-100	-100	.08
40	314	30	-300	40	0		-3	-100	-100	-100	.55
40	314	30	300	-40	-6000		-3	-100	-100	-100	.12
40	314	30	300	0	-3000		-3	-100	-100	-100	.14
40	314	30	600	0	-3000		-3	100	-100	-100	.07
40	314	30	600	0	-3000		-3	150	-100	-100	.15
40	314	30	600	0	0		-3	150	-100	-100	.36
40	314	30	600	0	0		3	100	-100	-100	.06
40	314	40	300	-60	BELOW		3	-100	-100	-100	.16
40	314	40	300	-60	-6000		3	100	-100	-100	.09
40	314	40	300	20	-3000		6	100	-100	-100	.07
40	314	40	600	-40	-6000		3	-100	-100	-100	.13
40	325	30	-300	40	0		-3	100	-100	-100	.29
40	325	30	300	-20	-3000		-3	150	-100	-100	.22
40	325	30	300	0	-3000		-3	150	-100	-100	.13
40	325	30	600	-80	-3000		-3	-100	-100	-150	.18
40	325	30	600	-60	-3000		-3	-100	-100	-150	.57
40	325	30	600	-60	0		-3	-100	-100	-200	.13
40	325	30	600	-60	0		-3	-100	-100	-150	.02
40	325	30	600	-60	0		-3	-100	-100	-100	.18
40	325	40	300	-60	-6000		3	-100	-100	-100	.27
40	325	40	600	-80	BELOW		-3	-100	-100	-100	.18
40	325	40	600	-80	-6000		-3	-100	-100	-150	.18
40	325	40	600	-80	-6000		-3	-100	-100	-100	.18
40	325	40	600	-80	-3000		-3	-100	-100	-150	.27
40	325	40	600	-60	-6000		-3	-100	-100	-100	.25
40	325	40	600	-60	-3000		-3	-100	-100	-150	.52
40	325	40	600	-60	0		-3	-100	-100	-150	.68
40	325	40	900	-80	-6000		-3	-100	-100	-150	.11
40	325	40	900	-80	-6000		-3	-100	-100	-100	.29
40	334	40	300	-60	-6000		-3	100	-100	-150	.14
60	314	20	-300	0	0		-3	100	-100	-100	.15
60	314	20	-300	20	0		-3	-100	-100	-100	.88
60	314	20	300	0	-3000		-3	-100	-100	-100	.14

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	20	300	20	0	-3	100	-100	-100	1.68
60	314	30	-300	-60	-6000	3	100	-100	-100	.11
60	314	30	-300	0	-3000	-3	150	-100	-100	.21
60	314	30	300	0	-3000	-3	-100	-100	-100	.14
60	314	30	300	0	-3000	-3	100	-100	-100	.12
60	314	30	600	-40	-6000	3	-100	-100	-100	.13
60	314	30	600	0	0	-3	100	-100	-100	.58
60	314	40	300	-60	BELOW	-3	-100	-100	-100	.29
60	314	40	300	-60	-6000	-3	100	-100	-100	.12
60	314	40	300	20	-3000	-3	100	-100	-100	.07
60	325	30	-300	40	0	-3	100	-100	-100	.14
60	325	30	300	-80	-6000	-3	-100	-100	-100	.12
60	325	30	300	-20	-3000	-3	150	-100	-100	.22
60	325	30	300	0	-3000	-3	100	-100	-100	.22
60	325	30	300	0	-3000	-3	150	-100	-100	.13
60	325	30	300	0	0	-3	-100	-100	-100	.10
60	325	30	300	0	0	-3	-100	100	-100	.16
60	325	30	300	0	0	-3	100	-100	-100	.23
60	325	30	600	-80	-6000	-3	-100	-100	-150	1.26
60	325	30	600	-80	-3000	-3	-100	-100	-150	.91
60	325	30	600	-80	-3000	3	-100	-100	-150	.09
60	325	30	600	-60	0	-3	-100	-100	-200	.54
60	325	30	600	-60	0	-3	-100	100	-200	.25
60	325	30	600	0	0	3	100	-100	-100	.06
60	325	40	-300	-40	-6000	3	-100	-100	-100	.07
60	325	40	300	-80	-6000	-3	-100	-100	-100	.18
60	325	40	300	-60	-6000	-3	-100	-100	-100	.27
60	325	40	600	-80	-6000	-3	-100	-100	-100	.18
60	325	40	600	-80	-3000	-3	-100	-100	-150	.09
60	325	40	600	-60	-3000	-3	-100	-100	-100	.05
70	304	30	-300	20	-3000	-3	100	-100	-100	.10
70	314	20	-300	0	0	-3	100	-100	-100	.15
70	314	20	-300	20	0	-3	-100	-100	-100	.60
70	314	20	300	0	-3000	-3	-100	-100	-100	.25
70	314	20	300	0	0	-3	-100	-100	-100	.27
70	314	20	300	20	0	-3	100	-100	-100	.64
70	314	30	-300	0	-3000	-3	100	-100	-100	.17
70	314	30	300	0	-3000	-3	-100	-100	-100	.10
70	314	30	300	0	-3000	-3	100	-100	-100	.12
70	314	40	300	-60	BELOW	-3	100	-100	-100	.09
70	314	40	300	20	-3000	-3	100	-100	-100	.04
70	314	40	900	20	0	-3	100	-100	-100	.25
70	325	20	-300	20	0	-3	-100	-100	-100	.14
70	325	20	-300	20	0	-3	100	-100	-100	.21
70	325	20	-300	40	0	-3	100	-100	-100	.61
70	325	30	-300	40	0	-3	100	-100	-100	.55
70	325	30	300	-80	-6000	-3	-100	-100	-150	.13
70	325	30	300	-80	-6000	-3	-100	-100	-100	.17
70	325	30	300	0	-3000	-3	-100	-100	-100	.15
70	325	30	300	0	-3000	-3	100	-100	-100	.67
70	325	30	300	0	-3000	-3	150	-100	-100	.21
70	325	30	300	0	0	-3	-100	100	-100	.33
70	325	30	600	-80	-6000	-3	-100	-100	-150	.27
70	325	30	600	-80	-3000	-3	-100	-100	-150	.36
70	325	30	600	-60	-3000	-3	-100	100	-200	.13
70	325	30	600	-60	0	-3	-100	100	-200	.09
70	325	30	600	-60	0	-3	-100	100	-150	.18
70	325	40	-300	-40	-6000	3	-100	-100	-100	.07

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	325	40	300	-80	-6000	-3	-100	-100	-100	.09
70	325	40	300	-60	-6000	-3	-100	-100	-100	.09
70	325	40	600	-80	-6000	-3	100	-100	-100	.18
70	325	40	600	-80	-3000	-3	-100	-100	-150	.48
70	334	40	300	-60	-6000	-3	100	-100	-150	.14
75	304	30	-300	20	-3000	-3	150	-100	-100	.13
75	314	20	-300	0	-3000	-3	100	-100	-100	.20
75	314	20	-300	0	0	-3	100	-100	-100	.13
75	314	20	-300	20	0	-3	-100	-100	-100	.23
75	314	20	300	0	-3000	-3	-100	-100	-100	1.02
75	314	20	300	0	0	-3	-100	-100	-100	.68
75	314	30	-300	-40	-3000	-3	-100	-100	-100	.09
75	314	30	-300	0	-3000	-3	100	-100	-100	.39
75	314	30	-300	20	-3000	-3	100	-100	-100	.13
75	314	40	300	-60	BELOW	-3	-100	-100	-100	.17
75	314	40	300	-60	-6000	-3	100	-100	-100	.12
75	314	40	900	20	0	-3	100	-100	-100	.12
75	325	20	-300	20	0	-3	100	-100	-100	.15
75	325	20	-300	40	0	-3	100	-100	-100	.14
75	325	20	300	0	-3000	-3	-100	-100	-100	.24
75	325	30	300	-80	-6000	-3	-100	-100	-150	.16
75	325	30	300	-20	-3000	-3	150	-100	-100	.22
75	325	30	300	0	-3000	-3	-100	-100	-100	.26
75	325	30	300	0	-3000	-3	100	-100	-100	.43
75	325	30	300	0	-3000	-3	150	-100	-100	.83
75	325	30	300	0	0	-3	-100	100	-100	.21
75	325	30	300	0	0	-3	100	-100	-100	.23
75	325	30	300	0	0	-3	100	100	-100	.69
75	325	30	600	0	0	-3	-100	-100	-100	.12
75	325	40	300	-100	BELOW	-3	-100	-100	-100	.04
75	325	40	300	-80	-6000	-3	-100	-100	-150	.13
75	325	40	300	-80	-6000	-3	-100	-100	-100	.09
75	325	40	300	-60	-6000	-3	-100	-100	-100	.09
75	325	40	300	-60	-3000	-3	-100	150	-150	.39
75	325	40	600	-80	-6000	-3	-100	-100	-150	.46
75	325	40	600	-80	-6000	-3	100	-100	-100	.27
75	325	40	600	-80	-3000	-3	-100	-100	-150	.39
80	314	20	-300	0	-3000	-3	100	-100	-100	.12
80	314	20	-300	0	0	-3	100	-100	-100	.13
80	314	20	300	0	0	-3	-100	-100	-100	.49
80	314	30	-300	-60	-6000	3	100	-100	-100	.11
80	314	30	-300	-40	-6000	-3	-100	-100	-100	.16
80	314	30	600	0	0	-3	-100	-100	-100	.12
80	314	40	300	-80	-6000	-3	100	-100	-100	.09
80	314	40	300	-60	BELOW	-3	100	-100	-100	.35
80	314	40	300	-60	-3000	-3	-100	100	-100	.33
80	314	40	300	-60	-3000	-3	-100	150	-100	.09
80	325	30	-300	-40	-6000	-3	-100	-100	-100	.10
80	325	30	300	-80	-6000	-6	-100	-100	-100	.10
80	325	30	300	-80	-6000	-3	-100	-100	-100	1.13
80	325	30	300	-60	-3000	-3	-100	150	-150	.69
80	325	30	300	0	0	-3	-100	100	-100	.43
80	325	40	300	-100	BELOW	-3	-100	-100	-100	.27
80	325	40	300	-80	-6000	-3	-100	-100	-100	.47
80	325	40	300	-80	-3000	-3	-100	-100	-150	.02
80	325	40	300	-60	-6000	-3	-100	-100	-100	.13
80	325	40	300	-60	-3000	-3	-100	150	-200	.17
80	325	40	300	-60	-3000	-3	-100	150	-150	.39

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	325	40	600	-80	-6000	-3	100	-100	-100	.45
80	325	40	600	-80	-3000	-3	-100	-100	-150	1.20
80	334	40	300	-60	-6000	-3	100	100	-150	.52
85	314	20	-300	0	0	-3	100	-100	-100	.52
85	314	30	300	-40	-3000	-3	-100	-100	-100	.28
85	314	40	300	-60	-6000	-3	-100	100	-100	.81
85	314	40	300	-60	-6000	-3	100	-100	-100	.87
85	314	40	300	-60	-3000	-3	-100	100	-100	1.13
85	325	30	300	-80	-6000	-3	-100	-100	-100	.34
85	325	30	300	-20	-3000	-3	150	-100	-100	.34
85	325	30	300	0	0	-3	-100	100	-100	.22
85	325	40	-300	-40	-6000	-3	-100	-100	-100	.16
85	325	40	300	-80	-6000	-3	-100	-100	-100	.57
85	325	40	300	-80	-6000	-3	100	-100	-100	.61
85	325	40	300	-60	-6000	-3	100	-100	-100	.13
85	325	40	300	-60	-3000	-3	-100	150	-200	.09
85	325	40	300	-60	-3000	-3	-100	150	-150	.86
85	325	40	300	-60	0	-3	-100	150	-150	.06
85	325	40	600	-80	-6000	-3	-100	-100	-100	.46
85	325	40	600	-80	-6000	-3	100	-100	-100	.07
85	325	40	600	-80	-3000	-6	-100	-100	-150	.04
85	325	40	600	-80	-3000	-3	-100	-100	-150	.25
90	314	30	-300	-60	-6000	-3	-100	-100	-100	1.73
90	314	30	300	-60	-6000	-3	100	-100	-100	.35
90	314	30	300	-40	-6000	-3	-100	-100	-100	.38
90	314	30	300	-40	-3000	-3	-100	-100	-100	.09
90	314	30	600	0	0	-3	100	-100	-100	.17
90	314	40	-300	-60	-6000	-3	100	-100	-100	.45
90	314	40	300	-80	-6000	-3	100	-100	-100	.29
90	314	40	300	-60	-6000	-3	-100	100	-100	.52
90	314	40	300	-60	-6000	-3	100	-100	-100	.26
90	314	40	300	-60	-6000	-3	100	100	-100	.74
90	314	40	300	-60	-3000	-3	-100	100	-100	1.01
90	325	30	300	-20	-3000	-3	100	-100	-100	.07
90	325	40	-300	-40	-6000	-3	-100	-100	-100	.55
90	325	40	300	-100	BELOW	-3	100	-100	-100	.27
90	325	40	300	-80	-6000	-6	100	-100	-100	.10
90	325	40	300	-80	-6000	-3	100	-100	-100	.89
90	325	40	300	-60	-6000	-3	-100	100	-150	.34
90	325	40	300	-60	-6000	-3	100	-100	-150	.17
90	325	40	300	-60	-6000	-3	100	100	-150	.21
90	325	40	300	-60	-3000	-3	-100	100	-150	.17
90	325	40	300	-60	-3000	-3	-100	150	-150	.53
90	325	40	300	-60	-3000	-3	-100	150	-100	.09
90	325	40	300	-60	0	-3	-100	150	-150	.06
90	325	40	600	-80	-6000	-6	-100	-100	-100	.04
90	325	40	600	-80	-6000	-3	-100	-100	-100	.05
90	325	40	600	-80	-3000	-3	-100	-100	-150	.14
90	334	40	300	-60	-6000	-3	100	100	-150	.17
95	314	30	600	0	0	-3	100	-100	-100	.08
95	314	40	-300	-80	-6000	-3	-100	-100	-100	1.94
95	314	40	-300	-60	-6000	-3	-100	-100	-100	1.27
95	314	40	-300	-60	-6000	-3	100	-100	-100	.58
95	314	40	300	-80	-6000	-3	150	-100	-100	.26
95	314	40	300	-60	-6000	-3	-100	100	-100	.09
95	314	40	300	-60	-6000	-3	100	-100	-100	2.18
95	314	40	300	-60	-3000	-3	-100	100	-100	.28
95	325	40	300	-100	BELOW	-3	100	-100	-100	.09

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	40	300	-60	-6000	-3	-100	100	-150	.17
95	325	40	300	-60	-6000	-3	100	-100	-150	.60
95	325	40	300	-60	-6000	-3	100	100	-150	.09
95	325	40	300	-60	-3000	-3	-100	100	-150	.69
95	325	40	300	-60	-3000	-3	-100	100	-100	.17
95	325	40	300	-60	-3000	-3	-100	150	-150	.17
100	314	40	-300	-80	-6000	-3	100	-100	-100	.64
100	314	40	-300	-60	-6000	-3	100	-100	-100	1.01
100	314	40	300	-60	-6000	-3	100	-100	-100	2.13
100	325	40	300	-60	-6000	-3	100	-100	-150	1.16
100	325	40	300	-60	-3000	-3	100	100	-100	.17
105	314	40	-300	-60	-6000	-3	100	-100	-100	.42
BLW	314	40	600	-40	-6000	6				.10
40	314	40	600	-60	-6000	3				.07
40	325	40	600	-40	-6000	6				.10
60	314	40	600	-60	-6000	-3				.18
60	325	40	600	-40	-6000	-3				.10
75	314	40	300	-60	-6000	-3				.46
75	314	40	600	-60	-6000	-3				.18
75	325	40	600	-40	-6000	-3				.10
80	314	30	-300	-60	-6000	-3				.15
80	314	40	600	-60	-6000	-3				.11
80	325	40	600	-40	-6000	-3				.36
80	325	40	600	-40	-3000	-3				.37
85	314	30	-300	-60	-6000	-3				.29
85	314	30	300	-60	-6000	6				.03
85	314	40	300	-60	-6000	-6				.05
85	314	40	300	-60	-6000	-3				.11
85	314	40	600	-60	-6000	-3				.17
85	325	40	600	-40	-3000	-3				.13
85	325	40	600	-40	-3000	-3				.17
90	314	30	-300	-60	-6000	-3				.27
90	314	30	300	-60	-6000	-3				.09
90	314	30	300	-60	-6000	6				.03
90	314	40	300	-60	-6000	-6				.05
90	314	40	600	-60	-6000	-3				.11
95	314	30	-300	-60	-6000	-3				.15
95	314	30	300	-60	-6000	-3				.11
95	314	40	300	-60	-6000	-3				.60
95	314	40	600	-60	-6000	-3				.41
100	314	30	-300	-60	-6000	-3				.12
100	314	30	300	-60	-6000	-3				.25
100	314	40	300	-60	-6000	-3				.15
105	314	30	-300	-60	-6000	-3				.12
105	314	30	-300	-60	-6000	-3				.16
105	314	30	300	-60	-6000	-3				.31
110	314	30	300	-60	-6000	-3				.14
110	314	40	300	-60	-6000	-3				.15
115	314	30	-300	-60	-6000	-3				.24
115	314	30	300	-60	-6000	-3				.05
120	314	20	600	-60	-6000	-6				.07
120	314	30	-300	-60	-6000	-3				.34
125	314	30	600	-60	-6000	-6				.07
BLW		30	300	0	-3000	-3	100	-100	-100	.24
60		30	300	0	-3000	-3	150	100	-100	.24
70		30	300	0	-3000	-3	100	100	-100	.25
70		30	300	0	-3000	-3	150	100	-100	.08
75		30	300	0	-3000	-6	100	100	-100	.03

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
75		30	300	0	-3000	-3	100	100	-100	.13
75		30	300	0	-3000	-3	150	100	-100	.08
75		30	300	0	-3000	-3	150	150	-100	.07
75		30	300	0	-3000	-3	100	100	-100	.37
75		30	300	0	-3000	-3	150	100	-100	.17
75		30	300	0	0	-3	150	150	-100	.25
80		30	300	0	-3000	-6	100	100	-100	.03
80		30	300	0	-3000	-3	150	150	-100	.05
80		30	300	0	-3000	-3	150	150	-100	.18
80		30	300	0	0	-3	100	150	-100	.39
80		30	300	0	0	-3	150	150	-100	.25
80		30	-300	20	0	-3	100	100	-150	.12
80		30	300	0	0	-3	100	150	-100	.44
85		30	300	0	-3000	-3	150	150	-100	.18
85		30	300	0	0	-3	150	150	-100	.47
85		20	-300	20	0	-3	100	150	-100	.65
85		20	-300	20	0	-3	150	150	-100	.63
85		30	-300	0	0	-3	100	100	-100	1.12
85		30	-300	20	0	-3	100	100	-150	.07
85		30	-300	20	0	-3	100	100	-100	1.07
85		30	-300	20	0	-3	100	150	-150	.17
85		30	-300	20	0	-3	150	100	-100	.12
85		30	300	0	0	-3	100	100	-150	.07
90		30	300	0	0	-3	100	150	-100	.32
90		30	300	0	0	-3	150	150	-100	.47
90		30	-300	20	0	-3	100	100	-150	.70
90		30	-300	20	0	-3	150	100	-100	.37
90		30	-300	20	0	-3	150	150	-100	.32
90		30	300	0	0	-3	200	150	-150	.09
95		30	-300	20	0	-3	100	100	-150	.05
95		30	-300	20	0	-3	150	100	-100	1.56
95		30	-300	20	0	-3	150	150	-150	.43
95		30	-300	20	0	-3	150	150	-100	.27
100		30	-300	20	0	-3	100	100	-150	.10
100		30	-300	20	0	-3	100	150	-150	.36

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 9000 LB.

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	-3000		-3	100	-100	-100	.03
BLW	314	30	-300	0	-3000		3	100	-100	-100	.18
BLW	314	30	-300	20	-3000		3	150	-100	-100	.10
BLW	314	30	300	-20	-3000		3	150	-100	-100	.17
BLW	314	30	300	0	-3000		3	100	-100	-100	.27
BLW	314	30	300	0	-3000		3	150	-100	-100	.17
BLW	314	30	300	0	-3000		6	150	-100	-100	.14
BLW	314	30	300	20	0		3	150	-100	-100	.03
BLW	314	40	300	-60	BELOW		3	-100	-100	-100	.12
BLW	314	40	300	-40	-6000		3	150	-100	-100	.10
BLW	325	30	-300	0	-3000		-3	100	-100	-100	.25
BLW	325	30	300	-20	-3000		-3	-100	-100	-100	.41
BLW	325	30	600	0	-3000		6	-100	-100	-100	.14
BLW	325	40	600	-80	BELOW		3	-100	-100	-100	.09
BLW	325	50	300	-60	BELOW		3	150	-100	-100	.09
40	314	30	-300	0	-3000		3	100	-100	-100	.18
40	314	30	-300	20	-3000		-3	200	-100	-100	.22
40	314	30	300	0	-3000		-3	100	-100	-100	.27
40	314	30	300	0	-3000		-3	150	-100	-100	.25
40	314	30	300	0	-3000		3	100	-100	-100	.27
40	314	30	300	20	0		3	200	-100	-100	.10
40	314	40	300	-60	BELOW		-3	-100	-100	-100	.16
40	325	20	-300	0	-3000		-3	-100	-100	-100	.44
40	325	20	-300	0	-3000		-3	100	-100	-100	.22
40	325	20	300	-20	-3000		-3	-100	-100	-100	.07
40	325	30	-300	-100	BELOW		-3	-100	-100	-100	.38
40	325	30	-300	-80	BELOW		-3	-100	-100	-100	.34
40	325	30	300	-20	-3000		-3	-100	-100	-100	.22
40	325	30	600	0	-3000		-3	100	-100	-100	.12
40	325	40	300	-60	BELOW		3	150	-100	-100	.15
40	325	40	300	-40	-6000		3	150	-100	-100	.10
40	325	40	600	-80	BELOW		-3	-100	-100	-100	.13
40	325	40	600	-80	BELOW		3	100	-100	-100	.05
60	314	30	-300	-60	-6000		-3	-100	-100	-100	.23
60	314	30	-300	0	-3000		-3	-100	-100	-100	.40
60	314	30	300	0	-3000		-3	150	-100	-100	.25
60	314	30	300	20	0		3	150	-100	-100	.10
60	314	40	300	-60	BELOW		-3	-100	-100	-100	.16
60	325	20	-300	0	-3000		-3	-100	-100	-100	.44
60	325	30	-300	-100	BELOW		-6	-100	-100	-100	.09
60	325	30	-300	-80	BELOW		-3	-100	-100	-100	.55
60	325	30	300	-20	-3000		-3	100	-100	-100	.43
60	325	40	300	-80	BELOW		-3	-100	-100	-100	.16
60	325	40	300	-40	BELOW		3	150	-100	-100	.15
60	325	40	300	-40	-6000		-3	150	-100	-100	.16
60	325	40	600	-80	BELOW		-3	100	-100	-100	.07
60	325	40	600	-40	-3000		-3	100	-100	-100	.30
70	314	20	-300	-20	-3000		-3	150	-100	-100	.07
70	314	20	300	0	-3000		-3	100	-100	-100	.37
70	314	30	-300	-60	-6000		-3	-100	-100	-100	.26
70	314	30	-300	-20	-3000		-3	150	-100	-100	.22
70	314	30	-300	0	-3000		-3	100	-100	-100	.41
70	314	30	300	0	-3000		-3	-100	100	-100	.28
70	314	30	300	0	-3000		-3	100	-100	-100	.35
70	314	30	300	0	-3000		-3	150	-100	-100	.09
70	314	40	300	-60	-6000		-3	-100	-100	-100	.39
70	314	40	300	-40	-6000		-3	150	-100	-100	.13
70	325	30	-300	-100	BELOW		-3	-100	-100	-100	.26

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	325	30	-300	-80	BELOW	-3	-100	-100	-100	.18
70	325	30	300	-80	BELOW	-3	-100	-100	-100	.16
70	325	30	600	-20	-3000	-3	100	-100	-100	.17
70	325	40	-300	-80	BELOW	-3	100	-100	-100	.14
70	325	40	300	-40	-6000	-3	150	-100	-100	.45
70	325	40	600	-80	BELOW	-3	100	-100	-100	.34
70	325	40	600	-40	-6000	-3	100	-100	-100	.59
70	325	40	600	-40	-3000	-3	100	-100	-100	.58
75	314	20	300	0	-3000	-3	100	-100	-100	.29
75	314	20	300	0	0	-3	100	-100	-100	.08
75	314	30	300	0	-3000	-3	-100	100	-100	.16
75	314	30	300	0	-3000	-3	100	-100	-100	.29
75	314	40	300	-60	BELOW	-3	-100	-100	-100	.13
75	314	40	300	-40	-6000	-3	150	-100	-100	.13
75	314	40	600	-60	BELOW	-3	100	-100	-100	.43
75	325	30	-300	-100	BELOW	-6	-100	-100	-100	.09
75	325	30	-300	-80	BELOW	-3	-100	-100	-100	.04
75	325	30	600	-20	-3000	-3	100	-100	-100	.17
75	325	40	300	-40	BELOW	-3	150	-100	-100	.38
75	325	40	300	-40	-6000	-3	150	-100	-100	.32
75	325	40	600	-60	BELOW	-3	100	-100	-100	.34
75	325	40	600	-60	-6000	-3	-100	-100	-100	.31
80	314	20	-300	20	0	-3	100	100	-100	.07
80	314	20	300	0	-3000	-3	100	-100	-100	.08
80	314	30	-300	-60	-6000	-3	-100	-100	-100	.35
80	314	30	-300	0	-3000	-3	100	100	-100	.14
80	314	30	-300	0	-3000	-3	150	100	-100	.21
80	314	30	-300	20	0	-3	100	100	-100	.09
80	314	30	300	-60	-6000	-3	-100	-100	-100	.71
80	314	30	300	-40	-6000	-3	150	-100	-100	.15
80	314	40	300	-60	BELOW	-3	-100	-100	-100	.39
80	314	40	300	-60	-6000	-3	-100	-100	-100	.39
80	314	40	300	-40	-6000	-3	150	-100	-100	.18
80	314	40	600	-60	BELOW	-3	100	100	-100	.17
80	325	40	-300	-80	BELOW	-3	100	-100	-100	.45
80	325	40	300	-40	-6000	-3	150	-100	-100	.77
80	325	40	600	-60	BELOW	-3	100	100	-100	.16
85	314	30	-300	-60	-6000	-3	-100	-100	-100	4.94
85	314	30	300	-40	-6000	-3	150	-100	-100	.34
85	314	40	300	-60	-6000	-3	-100	-100	-100	1.30
85	314	40	300	-20	-3000	-3	100	-100	-100	.34
85	325	40	600	-60	BELOW	-3	100	100	-100	.26
90	314	30	-300	-60	-6000	-3	-100	-100	-100	.26
90	314	30	-300	-40	-6000	-3	150	-100	-100	2.57
90	314	30	300	-40	-6000	-3	150	-100	-100	.55
90	314	40	-300	-60	BELOW	-3	150	-100	-100	.26
90	314	40	-300	-20	-3000	-3	100	-100	-100	.17
90	314	40	300	-40	-6000	-3	150	-100	-100	.18
90	314	40	300	-40	-3000	-3	100	100	-100	.24
90	314	40	300	-20	-3000	-3	100	100	-100	.34
95	314	30	-300	-60	BELOW	-3	-100	100	-100	.43
95	314	30	-300	-40	-6000	-3	150	-100	-100	.22
95	314	30	-300	-20	-3000	-3	100	-100	-150	.22
95	314	40	-300	-60	BELOW	-3	-100	100	-100	.16
95	314	40	-300	-60	BELOW	-3	150	-100	-100	.40
95	314	40	-300	-40	BELOW	-3	150	-100	-100	.21
95	314	40	300	-40	-6000	-3	150	-100	-100	.30

TABLE LXXXIII - Continued

STEADY STATE, ASCENT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	40	300	-40	-3000		-3	100	100	-100	.07
100	314	30	300	-40	-3000		-3	-100	100	-100	.09
100	314	40	-300	-60	BELOW		-3	-100	100	-100	1.35
100	314	40	-300	-60	BELOW		-3	150	-100	-100	.52
100	314	40	-300	-40	-6000		-3	150	100	-100	.17
100	314	40	300	-40	-6000		-3	150	-100	-100	.30
100	314	40	300	-40	-3000		-3	100	100	-100	.07
105	314	30	300	-40	-6000		-3	150	-100	-100	.05
105	314	40	-300	-60	BELOW		-3	-100	100	-100	.85
105	314	40	-300	-60	BELOW		-3	200	-100	-100	.09
105	314	40	-300	-40	-6000		-3	200	-100	-150	.03
105	314	40	300	-40	-6000		-3	150	-100	-150	.10
105	314	40	300	-40	-6000		-3	150	-100	-100	.52

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000	-3	-100	-100	-100	1.18
40	314	20	-300	-80	-6000	-3	-100	-100	-100	2.38
40	314	20	-300	-60	-6000	-3	-100	-100	-100	.33
40	314	20	-300	0	-3000	-3	-100	-100	-100	.19
40	314	20	-300	0	-3000	-3	100	-100	-100	.50
40	314	30	-300	-60	-6000	-3	-100	-100	-100	.36
40	314	30	-300	-40	-3000	-3	-100	100	-100	.21
60	314	20	-300	-80	-6000	-3	-100	-100	-100	.29
60	314	20	-300	-20	-3000	-6	-100	-100	-100	.06
60	314	20	-300	0	-3000	-3	100	-100	-100	.09
60	314	20	-300	0	-3000	3	100	-100	-100	.07
60	314	30	-300	-40	-3000	-6	-100	100	-100	.07
60	314	30	-300	-40	-3000	-3	-100	100	-100	.12
60	325	30	-300	-60	-6000	-3	-100	-100	-100	.49
70	314	20	-300	-80	-6000	-6	-100	-100	-100	.02
70	314	20	-300	-80	-6000	-3	-100	-100	-100	.15
70	314	20	-300	-20	-3000	-6	-100	-100	-100	.06
70	314	20	-300	-20	-3000	-3	-200	-100	-100	.63
70	314	20	-300	-20	-3000	-3	-100	-100	-100	.02
70	314	20	-300	0	-3000	-3	-100	-100	-100	.09
70	314	20	-300	0	-3000	-3	100	-100	-100	.05
70	314	30	-300	-80	-6000	-3	-100	-100	-100	.45
70	314	30	-300	-40	-3000	-3	-100	100	-100	.28
75	314	20	-300	-20	-3000	-3	-200	-100	-100	1.09
75	314	20	-300	0	-3000	-3	-100	-100	-100	.19
75	314	20	-300	0	-3000	-3	100	-100	-100	.19
75	314	40	-300	-40	-3000	-3	-100	100	-100	.12
80	314	20	-300	-20	-3000	-3	-200	-100	-100	9.06
80	314	20	-300	-20	-3000	-3	-100	-100	-100	.04
80	314	20	-300	0	-3000	-3	-100	-100	-100	.09
80	314	30	-300	-80	-6000	-3	-100	-100	-100	.33
80	314	30	-300	0	-3000	-3	100	-100	-100	.26
80	314	40	-300	-40	-3000	-3	-100	100	-100	.12
85	314	20	-300	-20	-3000	-3	-200	-100	-100	.34
85	314	20	-300	-20	-3000	-3	-100	-100	-100	.04
85	314	20	-300	-20	-3000	-3	100	-100	-100	.09
85	314	20	-300	0	-3000	-6	-100	-100	-100	.06
85	314	20	-300	0	-3000	-3	100	-100	-100	.14
85	314	30	-300	-20	-3000	-3	-100	-100	-100	.09
85	314	30	-300	-20	-3000	-3	100	-100	-100	.26
85	314	30	-300	0	-3000	-3	100	-100	-100	.60
85	314	40	-300	-40	-3000	-3	-100	100	-100	.37
85	325	20	-300	-20	-3000	-3	-250	-100	-100	.49
90	314	20	-300	-20	-3000	-3	100	-100	-100	.04
90	314	20	-300	0	-3000	-6	-100	-100	-100	.06
90	314	20	-300	0	-3000	-3	100	-100	-100	.14
90	314	30	-300	-20	-3000	-3	-100	-100	-100	.30
90	314	30	-300	-20	-3000	-3	100	-100	-100	1.40
90	314	30	-300	-20	-3000	3	100	-100	-100	.04
90	314	30	-300	-20	0	-3	-100	-100	-100	.26
90	325	20	-300	-20	-3000	-3	-250	-100	-100	.19
90	325	30	-300	-20	-6000	-3	150	-100	-100	.13
95	314	20	-300	-20	-3000	-6	100	-100	-100	.13
95	314	20	-300	-20	-3000	-3	-100	-100	-100	.09
95	314	20	-300	-20	-3000	-3	100	-100	-100	.52
95	314	30	-300	-20	-3000	-12	-100	-100	-100	.02

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 6000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	30	-300	-20	-3000	-6	-100	-100	-100	.04
95	314	30	-300	-20	-3000	-3	-100	-100	-100	.04
95	314	30	-300	-20	-3000	-3	100	-100	-100	.26
95	314	30	-300	-20	-3000	3	100	-100	-100	.04
95	314	30	-300	-20	0	-3	-100	-100	-100	.25
95	314	30	-300	0	-3000	-3	100	-100	-100	.14
95	314	40	-300	-20	-3000	-6	100	-100	-150	.02
95	325	20	-300	-20	-6000	-3	100	-100	-150	.09
95	325	30	-300	-20	-3000	-3	100	-100	-100	.22
95	334	30	-300	-20	-6000	-3	100	-100	-100	.10
100	314	20	-300	-20	-3000	-3	-100	-100	-100	.09
100	314	20	-300	-20	-3000	-3	100	-100	-100	1.38
100	314	30	-300	-20	-3000	-6	-100	-100	-100	.04
100	314	30	-300	-20	-3000	-6	100	-100	-100	.04
100	314	30	-300	-20	-3000	-3	-100	-100	-100	.09
100	314	30	-300	-20	-3000	-3	100	-100	-100	.04
100	314	30	-300	-20	0	-3	-100	-100	-150	.26
100	314	30	-300	-20	0	-3	-100	-100	-100	.34
100	314	30	-300	0	-3000	-3	100	-100	-100	.34
100	314	40	-300	-20	-3000	-3	100	-100	-100	.13
105	314	20	-300	-20	-3000	-6	100	-100	-100	.09
105	314	20	-300	-20	-3000	-3	-100	-100	-100	.36
105	314	20	-300	-20	-3000	-3	100	-100	-100	.78
105	314	30	-300	-20	-3000	-3	-100	-100	-100	.9[illegible]
105	314	30	-300	-20	0	-3	-100	-100	-100	.4[illegible]
105	314	30	-300	0	-3000	-3	100	-100	-100	.3[illegible]
105	325	30	-300	-20	-3000	-3	-100	-100	-100	.41
105	325	30	-300	-20	-3000	-3	100	-100	-100	1.03
110	314	20	-300	-20	-3000	-3	-100	-100	-100	.22
110	314	30	-300	-20	-3000	-3	-100	-100	-150	.69
110	314	30	-300	-20	-3000	-3	-100	-100	-100	6.11
110	314	30	-300	-20	-3000	-3	-100	100	-100	.34
110	314	30	-300	-20	-3000	-3	100	-100	-150	.09
110	314	30	-300	-20	-3000	-3	100	-100	-100	.26
110	314	30	-300	-20	0	-3	-100	-100	-150	.78
110	314	30	-300	-20	0	-3	-100	-100	-100	.09
110	314	30	-300	-20	0	3	-100	-100	-150	.04
110	325	30	-300	-20	-3000	-3	-100	-100	-100	.86
110	325	30	-300	-20	-3000	-3	100	-100	-100	1.88
115	314	30	-300	-20	-3000	-3	-100	-100	-150	4.00
115	314	30	-300	-20	-3000	-3	-100	-100	-100	9.56
115	314	30	-300	-20	-3000	-3	-100	100	-150	1.03
115	314	30	-300	-20	-3000	-3	-100	100	-100	.80
115	314	30	-300	-20	-3000	-3	100	-100	-150	1.21
115	314	30	-300	-20	0	-3	-100	-100	-150	.60
115	314	30	-300	-20	0	-3	-100	-100	-100	.09
115	314	30	-300	-20	0	3	-100	-100	-100	.04
115	325	30	-300	-20	-3000	-3	100	-100	-100	.09
120	314	30	-300	-20	-3000	-3	-100	-100	-100	2.24
120	314	30	-300	-20	-3000	-3	-100	100	-150	.34
120	314	30	-300	-20	-3000	-3	100	-100	-150	.34
120	314	30	-300	-20	0	-6	-100	-100	-100	.05
125	314	30	-300	-20	0	-6	-100	100	-100	.05

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000		-3	-100	-100	-100	.68
BLW	314	20	-300	-40	-6000		-3	-100	-100	-100	.49
BLW	314	20	-300	-40	-3000		-3	-100	-100	-100	.46
BLW	314	20	-300	-40	-3000		6	-100	-100	-100	.02
BLW	314	20	-300	-20	0		-3	100	-100	-100	.17
BLW	314	20	-300	0	0		-3	-100	-100	-100	.03
BLW	314	20	300	-80	-6000		-3	100	-100	-100	.04
BLW	314	20	300	-60	-6000		-3	-100	-100	-100	.11
BLW	314	30	-300	-80	-6000		-3	-100	-100	-100	.27
BLW	314	30	-300	-80	-6000		-3	100	-100	-100	.27
BLW	314	30	-300	-60	-6000		-6	-100	-100	-100	.07
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	1.92
BLW	314	30	-300	-60	-6000		3	-100	-100	-100	.13
BLW	314	30	-300	-40	-6000		-3	-100	-100	-100	.54
BLW	314	30	-300	-40	-3000		-3	-100	-100	-100	.19
BLW	314	30	-300	-40	-3000		-3	100	-100	-100	.35
BLW	314	30	-300	20	0		3	-100	-100	-100	.12
BLW	314	30	1200	-40	-3000		3	-100	-100	-100	.02
BLW	314	40	-300	-80	-6000		3	-100	-100	-100	.04
BLW	314	40	-300	-60	-6000		-3	-100	-100	-100	.36
BLW	314	40	300	-60	-6000		-3	-100	-100	-100	.20
40	314	10	-600	-80	-6000		-3	-100	-100	100	.14
40	314	10	-300	-20	0		-3	-100	-100	-100	.17
40	314	20	-900	0	3000		-3	-100	-100	-100	.07
40	314	20	-600	-60	-6000		-3	-100	-100	-100	.21
40	314	20	-300	-80	-6000		-3	-100	-100	-100	1.48
40	314	20	-300	-60	-6000		-6	-100	-100	-100	.16
40	314	20	-300	-60	-6000		-3	-100	-100	-100	3.37
40	314	20	-300	-40	-6000		-3	-100	-100	-100	.11
40	314	20	-300	-40	-3000		-3	-100	-100	-100	.18
40	314	20	-300	-20	0		-3	-100	-100	-100	.09
40	314	20	-300	-20	0		-3	-100	-100	100	.07
40	314	30	-300	-60	-6000		-3	-100	-100	-100	.61
60	314	20	-600	-80	-6000		-3	-100	-100	-100	.12
60	314	20	-300	-80	-6000		-3	-100	-100	-100	.25
60	314	20	-300	-60	-6000		-3	-100	-100	-100	3.22
60	314	20	-300	-20	-3000		-3	-100	-100	100	.26
60	314	30	-300	-80	-6000		-3	-100	-100	-100	.18
60	314	30	-300	-60	-6000		-3	-100	-100	-100	.20
60	314	30	-300	0	6000		-3	-100	-100	-100	.05
60	314	30	-300	20	0		3	-100	-100	-100	.12
70	314	20	-600	-80	-6000		-3	-100	-100	-100	.12
70	314	20	-300	-60	-6000		-3	-100	-100	-100	.39
70	314	20	-300	-20	-3000		-3	100	-100	-100	.22
70	314	20	-300	-20	0		-3	-200	-100	-100	.09
70	314	20	-300	-20	0		-3	-150	-100	-100	.74
70	314	30	-300	-60	-6000		-3	-100	-100	-100	.18
70	314	30	-300	0	6000		-3	-100	-100	-100	.46
70	325	20	-300	20	0		-3	-100	-100	-100	.08
70	325	30	-300	-100	BELOW		-3	-100	100	-100	.57
75	314	20	-600	-80	-6000		-3	-100	-100	-100	.10
75	314	20	-600	0	6000		-3	-100	-100	-100	.12
75	314	20	-300	-60	-3000		-3	-100	-100	-100	.11
75	314	20	-300	-20	0		-3	-200	-100	-100	1.37
75	314	20	-300	-20	0		-3	-150	-100	-100	2.26
75	314	20	-300	-20	0		-3	-100	-100	-100	.09
75	314	30	-900	-60	-3000		-3	-100	100	-150	.07

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
75	314	30	-300	-60	-6000	-3	-100	-100	-100	.16
75	314	30	-300	-60	-3000	-3	-100	-100	-100	.16
75	314	30	-300	-20	0	-3	-100	100	-100	.18
75	314	30	-300	0	6000	-3	-100	-100	-150	.18
75	314	30	-300	0	6000	-3	-100	-100	-100	.40
75	325	20	-600	20	0	-3	-100	-100	100	.06
75	325	20	-300	-20	-3000	-3	-100	100	-100	.10
75	325	20	-300	-20	-3000	3	-100	100	-100	.03
75	325	20	-300	-20	-3000	3	100	100	-100	.03
75	325	20	-300	-20	0	-3	-100	100	-100	.24
75	325	20	-300	20	0	-3	-100	-100	-100	.08
75	325	30	-300	-80	BELOW	-3	-100	-100	-100	.45
80	314	20	-600	-80	-6000	-3	-100	-100	-100	.10
80	314	20	-300	-20	-3000	-3	-100	100	-100	.41
80	314	20	-300	-20	-3000	6	-100	100	-100	.02
80	314	20	-300	-20	0	-3	-200	-100	-100	4.22
80	314	20	-300	-20	0	-3	-150	-100	-100	11.01
80	314	20	-300	-20	0	-3	-100	100	-100	.33
80	314	20	-300	0	0	-3	-100	100	-100	.88
80	314	30	-300	-60	-6000	-3	-100	-100	-100	1.13
80	314	30	-300	-20	0	-3	-100	100	-100	2.36
80	314	30	-300	0	6000	-3	-100	-100	-150	.44
80	314	30	-300	0	6000	-3	-100	100	-150	.27
80	314	30	-300	20	0	-3	-100	-100	-100	.09
80	314	30	-300	20	0	3	-100	-100	-100	.06
80	325	20	-300	-20	-3000	-6	-100	100	-100	.03
80	325	20	-300	-20	-3000	-3	-100	100	-100	1.00
80	325	20	-300	-20	-3000	-3	100	-100	-100	.21
80	325	20	-300	-20	-3000	3	-100	100	-100	.16
80	325	20	-300	-20	-3000	3	100	100	-100	.06
80	325	20	-300	-20		-3	-100	-100	-100	.09
80	325	20	-300	-20		-3	-100	100	-100	.61
80	325	20	-300	0	-3000	-3	100	-100	-100	.14
80	325	20	-300	0	-3000	-3	100	100	-100	.64
80	325	20	-300	20	0	-3	-100	-100	-100	.20
80	325	20	-300	20	0	-3	100	-100	-100	.10
80	325	30	-300	-100	BELOW	-3	-100	-100	-100	.93
80	325	30	-300	-80	BELOW	-3	-100	-100	-100	.59
80	325	30	-300	-20	0	-3	-100	100	-100	.81
80	325	40	-300	-100	BELOW	-3	100	-100	-100	.41
85	314	20	-600	0	6000	-3	-100	-100	-100	.12
85	314	20	-300	-20	-3000	-3	-100	100	-100	.12
85	314	20	-300	-20	-3000	-3	100	100	-100	.36
85	314	20	-300	-20	0	-3	-200	-100	-100	7.16
85	314	20	-300	-20	0	-3	-150	-100	-100	6.96
85	314	20	-300	-20	0	-3	-100	100	-100	.37
85	314	30	-300	-60	-6000	-3	-100	-100	-100	1.01
85	314	30	-300	-60	-3000	-3	-100	100	-200	.57
85	314	30	-300	-40	-3000	-3	-100	-100	-100	.95
85	314	30	-300	-40	-3000	-3	-100	100	-100	.10
85	314	30	-300	-20	0	-3	-100	100	-100	4.42
85	314	30	-300	0	6000	-3	-100	-100	-100	.13
85	314	30	-300	0	6000	-3	-100	100	-150	.31
85	314	30	-300	20	0	-3	-100	-100	-100	.12
85	325	20	-300	-20	-3000	-6	-100	100	-100	.09
85	325	20	-300	-20	-3000	-6	100	100	-100	.06
85	325	20	-300	-20	-3000	-3	-100	-100	-100	.09
85	325	20	-300	-20	-3000	-3	-100	100	-100	2.04

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
85	325	20	-300	-20	-3000		-3	100	100	-100	.65
85	325	20	-300	-20	-3000		3	-100	100	-100	.09
85	325	20	-300	-20	-3000		3	100	100	-100	.03
85	325	20	-300	-20	-3000		6	-100	100	-100	.02
85	325	20	-300	-20	0		-3	-100	100	-100	1.92
85	325	20	-300	0	-3000		-3	100	100	-100	.41
85	325	20	-300	0	0		-3	-100	100	-100	.52
85	325	20	-300	20	0		-3	-100	-100	-100	.12
85	325	20	-300	20	0		-3	-100	-100	100	.23
85	325	20	-300	20	0		-3	100	-100	-100	.10
85	325	20	-300	20	0		-3	150	-100	100	.43
85	325	20	300	20	0		-3	-100	-100	-100	.05
85	325	30	-300	-100	BELOW		-3	100	-100	-100	1.12
85	325	30	-300	-80	BELOW		-3	-100	-100	-100	.58
85	325	30	-300	-80	BELOW		-3	100	-100	-100	1.08
85	325	30	-300	-20	-3000		-3	-100	-100	-100	.46
85	325	30	-300	-20	-3000		-3	-100	100	-100	.07
85	325	30	-300	-20	-3000		3	-100	-100	-100	.04
85	325	30	300	20	0		-3	-100	-100	-100	.37
85	325	40	-300	-100	BELOW		-3	100	-100	-100	2.92
85	325	40	-300	-20	-3000		-3	100	-100	-150	.33
90	314	20	-600	0	6000		-3	-100	-100	-100	.44
90	314	20	-600	0	6000		-3	-100	100	-100	.18
90	314	20	-300	-20	-3000		-3	-100	100	-100	.48
90	314	20	-300	-20	-3000		-3	100	100	-100	.31
90	314	20	-300	-20	0		-3	-200	-100	-100	.95
90	314	20	-300	-20	0		-3	-150	-100	-100	1.07
90	314	20	-300	-20	0		-3	-100	100	-100	.43
90	314	20	-300	-20	3000		-3	-100	-100	-100	.18
90	314	20	-300	0	-3000		-3	100	-100	-100	1.16
90	314	20	-300	0	6000		-3	-100	100	-150	.09
90	314	20	-300	0	6000		-3	-100	100	-100	.31
90	314	20	-300	20	0		-3	-100	-100	-100	.12
90	314	30	-600	-60	-3000		-3	-100	100	-200	.05
90	314	30	-300	-60	-6000		-3	-100	-100	-100	2.61
90	314	30	-300	-60	-6000		-3	-100	100	-150	.14
90	314	30	-300	-60	-3000		-3	-100	-100	-100	.95
90	314	30	-300	-60	-3000		-3	-100	100	-200	1.08
90	314	30	-300	-60	-3000		-3	-100	100	-150	.21
90	314	30	-300	-60	0		-3	-100	100	-200	1.41
90	314	30	-300	-40	-3000		-3	-100	-100	-100	.62
90	314	30	-300	-40	-3000		-3	-100	100	-100	.57
90	314	30	-300	-20	-3000		-3	-100	100	-100	.48
90	314	30	-300	-20	0		-3	-100	100	-100	2.89
90	314	30	-300	0	-3000		-3	100	-100	-100	.48
90	314	30	-300	20	0		-3	-100	-100	-100	.12
90	314	30	600	-60	-3000		-3	-100	100	-150	.03
90	314	30	600	-60	0		-3	-100	100	-200	.17
90	314	40	-300	-60	-3000		-3	-100	-100	-200	.09
90	325	20	-300	-20	-3000		-6	-100	-100	-100	.03
90	325	20	-300	-20	-3000		-6	-100	100	-100	.03
90	325	20	-300	-20	-3000		-6	100	100	-100	.19
90	325	20	-300	-20	-3000		-3	-100	-100	-100	.09
90	325	20	-300	-20	-3000		-3	-100	100	-100	.93
90	325	20	-300	-20	-3000		-3	100	-100	-100	.31
90	325	20	-300	-20	-3000		-3	100	100	-100	1.05
90	325	20	-300	-20	0		-3	-100	100	-100	.50
90	325	20	-300	20	0		-3	-100	-100	-100	.23

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
90	325	30	-300	-80	BELOW	-3	100	-100	-100	4.98
90	325	30	-300	-80	-6000	-3	-100	-100	-100	1.73
90	325	30	-300	-20	-3000	-3	-100	-100	-100	.13
90	325	30	-300	-20	-3000	-3	-100	100	-100	1.07
90	325	30	-300	-20	-3000	-3	100	-100	-100	.26
90	325	30	-300	-20	-3000	-3	100	100	-100	.22
90	325	30	-300	-20	-3000	3	-100	-100	-100	.03
90	325	30	-300	-20	0	-3	-100	-100	-100	.30
90	325	30	-300	-20	0	-3	-100	100	-100	.82
90	325	40	-300	-100	BELOW	-3	100	-100	-100	7.00
90	325	40	-300	-80	BELOW	-3	100	-100	-100	2.92
95	314	20	-600	0	6000	-3	-100	-100	-100	.37
95	314	20	-300	-20	-3000	-3	100	100	-100	.45
95	314	20	-300	-20	0	-3	-100	-100	-100	.09
95	314	20	-300	-20	0	-3	-100	100	-100	.09
95	314	20	-300	0	-3000	-3	100	-100	-100	7.52
95	314	20	-300	0	-3000	3	100	-100	-100	.07
95	314	20	-300	0	0	-3	100	-100	-100	.81
95	314	20	-300	0	0	-3	150	-100	-100	.13
95	314	20	-300	0	3000	-3	-100	-100	-100	.14
95	314	20	-300	0	6000	-3	-100	100	-100	1.26
95	314	30	-1500	-60	-3000	-3	-100	150	-150	.03
95	314	30	-600	-60	-3000	-3	-100	100	-150	.05
95	314	30	-300	-80	-6000	-3	-100	-100	-100	.30
95	314	30	-300	-80	-3000	-3	-100	-100	-100	.88
95	314	30	-300	-60	-6000	-3	-100	-100	-150	.40
95	314	30	-300	-60	-6000	-3	-100	-100	-100	1.67
95	314	30	-300	-60	-3000	-3	-100	-100	-200	.03
95	314	30	-300	-60	-3000	-3	-100	-100	-150	.10
95	314	30	-300	-60	-3000	-3	-100	-100	-100	.52
95	314	30	-300	-60	-3000	-3	-100	100	-200	6.55
95	314	30	-300	-60	-3000	-3	-100	100	-150	2.30
95	314	30	-300	-60	-3000	-3	-100	100	-100	.37
95	314	30	-300	-60	0	-3	-100	100	-200	.09
95	314	30	-300	-40	-3000	-3	-100	-100	-100	3.23
95	314	30	-300	-40	-3000	-3	-100	100	-100	1.97
95	314	30	-300	-20	-3000	-6	100	100	-100	.03
95	314	30	-300	-20	-3000	-3	-100	100	-100	.26
95	314	30	-300	-20	-3000	-3	100	100	-100	.12
95	314	30	-300	-20	0	-3	-100	100	-100	.90
95	314	30	-300	-20	0	-3	100	100	-100	.81
95	314	30	-300	-20	3000	-3	-100	-100	-100	.44
95	314	30	-300	0	-3000	-3	100	-100	-100	2.65
95	314	30	-300	0	-3000	-3	100	100	-100	.60
95	314	30	-300	0	-3000	-3	150	-100	-100	.17
95	314	30	-300	20	0	-3	-100	-100	-100	.08
95	314	40	-1800	-60	-3000	-3	-100	100	-200	.03
95	314	40	-300	-60	-6000	-3	-100	-100	-100	.14
95	314	40	-300	-60	-3000	-3	-100	-100	-200	.62
95	314	40	-300	-60	-3000	-3	-100	100	-200	2.29
95	314	40	-300	-60	-3000	-3	-100	100	-150	1.72
95	314	40	-300	-40	-3000	-3	-100	-100	-100	.67
95	314	40	-300	-40	-3000	-3	100	-100	-100	.78
95	325	20	-300	-20	-3000	-6	-100	-100	-100	.03
95	325	20	-300	-20	-3000	-6	100	100	-100	.04
95	325	20	-300	-20	-3000	-3	100	-100	-100	.18
95	325	20	-300	-20	-3000	-3	100	100	-100	.19
95	325	20	-300	20	0	-3	-100	-100	-100	.06
95	325	30	-300	-80	BELOW	-3	100	-100	-100	2.85

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	30	-300	-80	BELOW	-3	150	-100	-100	.11
95	325	30	-300	-80	-6000	-3	-100	-100	-100	3.05
95	325	30	-300	-80	-3000	-3	-100	-100	-100	.09
95	325	30	-300	-20	-3000	-3	-100	-100	-100	.65
95	325	30	-300	-20	-3000	-3	-100	100	-100	.12
95	325	30	-300	-20	-3000	-3	100	-100	-100	.28
95	325	30	-300	-20	-3000	-3	100	100	-100	.73
95	325	30	-300	-20	-3000	3	-100	-100	-100	.07
95	325	30	-300	-20	0	-3	-100	-100	-100	.82
95	325	30	-300	-20	0	-3	-100	100	-100	2.95
95	325	30	-300	0	-3000	-3	100	-100	-100	.65
95	325	40	-300	-100	BELOW	-3	100	-100	-100	2.12
95	325	40	-300	-80	BELOW	-3	100	-100	-100	1.18
95	325	40	-300	-80	BELOW	-3	150	-100	-100	.90
95	325	40	-300	-80	-6000	-3	100	-100	-100	1.63
95	325	40	-300	-20	-3000	-3	100	-100	-150	.21
95	334	30	-300	-20	0	-3	-100	100	-100	.46
100	314	20	-300	0	-3000	-3	100	-100	-100	4.73
100	314	20	-300	0	-3000	-3	150	-100	-100	.19
100	314	20	-300	0	0	-3	100	-100	-100	1.45
100	314	30	-600	-60	-3000	-3	-100	-100	-150	.41
100	314	30	-300	-80	-6000	-3	-100	-100	-100	4.59
100	314	30	-300	-80	-6000	-3	100	-100	-100	.80
100	314	30	-300	-80	-3000	-3	-100	-100	-100	.09
100	314	30	-300	-60	-6000	-3	-100	-100	-150	.43
100	314	30	-300	-60	-6000	-3	-100	-100	-100	1.94
100	314	30	-300	-60	-6000	-3	-100	100	-100	.09
100	314	30	-300	-60	-3000	-3	-100	-100	-150	.17
100	314	30	-300	-60	-3000	-3	-100	-100	-100	.72
100	314	30	-300	-60	-3000	-3	-100	100	-200	.05
100	314	30	-300	-60	-3000	-3	-100	100	-150	.86
100	314	30	-300	-60	-3000	-3	-100	100	-100	.23
100	314	30	-300	-40	-3000	-3	-100	-100	-100	2.33
100	314	30	-300	-20	-3000	-3	100	-100	-100	1.13
100	314	30	-300	-20	0	-3	-100	100	-150	.69
100	314	30	-300	-20	0	-3	-100	100	-100	.67
100	314	30	-300	0	-3000	-3	100	-100	-100	8.52
100	314	30	-300	0	-3000	-3	150	-100	-100	3.44
100	314	40	-300	-80	BELOW	-3	100	-100	-100	.39
100	314	40	-300	-60	-6000	-3	-100	-100	-150	.14
100	314	40	-300	-60	-6000	-3	100	-100	-100	.89
100	314	40	-300	-60	-3000	-3	-100	-100	-200	.07
100	314	40	-300	-60	-3000	-3	-100	-100	-150	1.17
100	314	40	-300	-60	-3000	-3	-100	100	-200	.26
100	314	40	-300	-60	-3000	-3	-100	100	-150	2.49
100	314	40	-300	-60	0	-3	-100	100	-200	.43
100	314	40	-300	-40	-3000	-3	-100	-100	-100	2.18
100	314	40	-300	-40	-3000	-3	100	-100	-100	1.07
100	314	40	-300	-40	0	-3	-100	-100	-100	.50
100	325	30	-600	-80	-6000	-3	-100	-100	-100	.07
100	325	30	-300	-80	BELOW	-3	100	-100	-100	.42
100	325	30	-300	-80	-6000	-3	-100	-100	-100	1.50
100	325	30	-300	-20	-3000	-6	-100	-100	-100	.04
100	325	30	-300	-20	-3000	-3	-100	-100	-100	1.03
100	325	30	-300	-20	-3000	-3	100	-100	-100	.19
100	325	30	-300	-20	0	-3	-100	-100	-100	.28
100	325	30	-300	-20	0	-3	-100	100	-100	4.42
105	314	20	-300	0	-3000	-3	150	-100	-100	.32
105	314	20	-300	0	0	-3	100	-100	-100	.05

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
105	314	30	-300	-80	-6000		-3	-100	-100	-100	.32
105	314	30	-300	-80	-6000		-3	100	-100	-100	.41
105	314	30	-300	-80	-3000		-3	-100	-100	-100	.27
105	314	30	-300	-60	-6000		-3	-100	-100	-100	1.87
105	314	30	-300	-60	-3000		-3	-100	-100	-100	.93
105	314	30	-300	-60	-3000		-3	-100	100	-100	.17
105	314	30	-300	-20	-3000		-3	-100	-100	-150	.09
105	314	30	-300	-20	-3000		-3	-100	-100	-100	.13
105	314	30	-300	-20	-3000		-3	100	-100	-100	.48
105	314	30	-300	-20	0		-3	-100	100	-150	2.46
105	314	30	-300	-20	0		-3	-100	100	-100	.88
105	314	30	-300	0	-3000		-3	100	-100	-100	4.11
105	314	30	-300	0	-3000		-3	150	-100	-100	2.87
105	314	40	-300	-80	BELOW		-3	150	-100	-100	.86
105	314	40	-300	-80	-6000		-3	-100	-100	-100	.09
105	314	40	-300	-80	-6000		-3	100	-100	-100	.41
105	314	40	-300	-80	-3000		-3	100	-100	-100	.71
105	314	40	-300	-60	-6000		-3	-100	-100	-100	2.26
105	314	40	-300	-60	-6000		-3	100	-100	-100	5.35
105	314	40	-300	-40	-3000		-3	100	-100	-100	1.43
105	325	30	-600	-80	-6000		-3	-100	-100	-100	.21
105	325	30	-300	-80	-6000		-3	100	-100	-100	.11
105	325	30	-300	-20	-3000		-6	-100	-100	-100	.04
105	325	30	-300	-20	-3000		-3	-100	-100	-100	.43
105	325	30	-300	-20	-3000		-3	100	100	-100	.22
105	325	30	-300	-20	0		-3	-100	100	-100	.13
105	325	30	-300	0	-3000		-3	100	100	-100	.07
105	334	30	-300	-20	0		-3	-100	100	-100	.34
110	314	30	-300	-20	-3000		-3	100	-100	-100	.42
110	314	30	-300	-20	-3000		-3	100	100	-150	.22
110	314	30	-300	-20	-3000		-3	100	100	-100	1.46
110	314	30	-300	-20	0		-3	-100	100	-150	1.35
110	314	30	-300	-20	0		-3	-100	100	-100	.97
110	314	30	-300	0	-3000		-3	100	-100	-100	3.21
110	314	30	-300	0	-3000		-3	150	-100	-100	1.99
110	314	40	-300	-80	BELOW		-3	150	-100	-100	1.90
110	314	40	-300	-80	BELOW		-3	200	-100	-100	.77
110	314	40	-300	-60	-6000		-3	-100	-100	-100	.26
110	314	40	-300	-60	-6000		-3	100	-100	-100	3.17
110	314	40	-300	-60	-6000		-3	150	-100	-100	.09
110	314	40	-300	-60	-3000		-3	-100	-100	-100	.44
110	314	40	-300	-60	-3000		-3	100	-100	-100	.61
110	325	30	-300	-20	-3000		-3	100	-100	-100	2.33
110	334	30	-300	-20	0		-3	-100	100	-100	.70
115	314	30	-300	-20	-3000		-3	100	-100	-100	.86
115	314	30	-300	-20	-3000		-3	100	100	-150	.52
115	314	30	-300	-20	-3000		-3	100	100	-100	1.91
115	314	30	-300	0	-3000		-3	100	-100	-100	1.06
115	314	30	-300	0	-3000		-3	150	-100	-100	.73
115	314	40	-300	-80	BELOW		-3	150	-100	-100	.24
115	325	30	-300	-20	-3000		-3	100	100	-100	.17
70	314	30	-300	-20	-3000		-3				.18
85	314	30	-300	-20	-3000		-3				.18
90	314	30	-300	-40	-6000		-3				.07
90	314	30	-300	-40	-6000		3				.04
90	314	30	-300	-20	-3000		3				.06
95	314	30	-300	-80	-3000		-3				.21
95	314	30	-300	-40	-3000		-3				1.46
95	314	30	-300	-40	-3000		-3				.46

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
105	314	30	-300	-40	0		-3				.50
105	314	30	-300	-40	0		-3				.16
105	314	30	-300	-20	-3000		-9				.03
105	314	30	-300	-20	-3000		-6				.03
105	314	30	-300	-20	-3000		-3				1.59
105	314	30	-300	-20	-3000		-3				.65
105	314	30	-300	-20	-3000		-3				.09
105	314	30	-300	-20	-3000		-3				.31
105	314	30	-300	-20	-3000		3				.10
105	314	30	-300	-20	-3000		3				.03
105	314	30	-300	-20	-3000		6				.02
105	314	30	-300	-20	-3000		6				.03
105	314	30	-300	-20	-3000		15				.01
105	314	30	-300	-20	0		-3				1.36
105	314	40	-300	-80	-6000		-3				.06
105	314	40	-300	-80	-3000		-3				.19
105	314	40	-300	-20	-3000		-3				1.11
110	304	30	-300	-80	-6000		-3				.90
110	304	30	-300	-80	-6000		-3				.47
110	304	40	-300	-80	-6000		-3				1.38
110	314	30	-300	-80	-6000		-3				.78
110	314	30	-300	-80	-6000		-3				.16
110	314	30	-300	-80	-6000		-3				.86
110	314	30	-300	-80	-6000		-3				2.48
110	314	30	-300	-80	-3000		-3				.12
110	314	30	-300	-80	-3000		-3				.34
110	314	30	-300	-80	-3000		-3				.80
110	314	30	-300	-80	-3000		-3				.47
110	314	30	-300	-60	-6000		-6				.03
110	314	30	-300	-60	-6000		3				.03
110	314	30	-300	-60	-6000		6				.02
110	314	30	-300	-40	-3000		-6				.05
110	314	30	-300	-40	-3000		-6				.09
110	314	30	-300	-40	-3000		-6				.05
110	314	30	-300	-40	-3000		-3				2.62
110	314	30	-300	-40	-3000		-3				.05
110	314	30	-300	-40	-3000		-3				.54
110	314	30	-300	-40	-3000		-3				1.06
110	314	30	-300	-40	-3000		-3				2.51
110	314	30	-300	-40	-3000		-3				.41
110	314	30	-300	-40	-3000		-3				2.52
110	314	30	-300	-40	-3000		-3				.06
110	314	30	-300	-40	-3000		3				.03
110	314	30	-300	-40	-3000		3				.03
110	314	30	-300	-40	-3000		3				.03
110	314	30	-300	-40	-3000		9				.02
110	314	30	-300	-40	0		-3				.16
110	314	30	-300	-40	0		-3				.33
110	314	30	-300	-20	-3000		-6				.17
110	314	30	-300	-20	-3000		-6				.04
110	314	30	-300	-20	-3000		-3				.14
110	314	30	-300	-20	-3000		-3				.92
110	314	30	-300	-20	-3000		-3				1.00
110	314	30	-300	-20	-3000		-3				.16
110	314	30	-300	-20	-3000		-3				.05
110	314	30	-300	-20	-3000		9				.02
110	314	30	-300	-20	-3000		15				.01
110	314	30	-300	-20	0		-3				.14
110	314	40	-300	-80	-6000		-3				.43

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
110	314	40	-300	-80	-3000		-3				.60
110	314	40	-300	-80	-3000		-3				.16
110	314	40	-300	-80	-3000		-3				.10
110	314	40	-300	-40	-3000		-3				1.53
110	314	40	-300	-40	-3000		-3				.11
110	314	40	-300	-40	0		-3				.17
110	314	40	-300	-20	-3000		-3				.11
110	314	40	-300	-20	-3000		-3				.28
115	304	30	-300	-80	-6000		-3				.17
115	304	30	-300	-80	-6000		-3				1.12
115	304	30	-300	-80	-6000		-3				.88
115	304	40	-300	-80	-6000		-3				.07
115	304	40	-300	-80	-6000		-3				1.57
115	304	40	-300	-80	-6000		-3				.27
115	314	30	-300	-80	-6000		-3				.95
115	314	30	-300	-80	-6000		-3				.16
115	314	30	-300	-80	-6000		-3				.34
115	314	30	-300	-80	-3000		-3				.12
115	314	30	-300	-80	-3000		-3				.15
115	314	30	-300	-80	-3000		-3				.53
115	314	30	-300	-80	-3000		-3				.33
115	314	30	-300	-60	-6000		-6				.03
115	314	30	-300	-60	-6000		-6				.05
115	314	30	-300	-60	-6000		-3				.16
115	314	30	-300	-40	-3000		-6				.04
115	314	30	-300	-40	-3000		-6				.09
115	314	30	-300	-40	-3000		-3				.90
115	314	30	-300	-40	-3000		-3				.47
115	314	30	-300	-40	-3000		-3				.30
115	314	30	-300	-40	-3000		-3				.05
115	314	30	-300	-40	-3000		-3				1.31
115	314	30	-300	-40	-3000		-3				.05
115	314	30	-300	-40	-3000		6				.04
115	314	30	-300	-20	-3000		-6				.16
115	314	30	-300	-20	-3000		-3				.21
115	314	30	-300	-20	-3000		-3				.07
115	314	30	-300	-20	-3000		-3				.50
115	314	30	-300	-20	-3000		-3				.22
115	314	30	-300	-20	0		-3				.14
115	314	40	-300	-80	-6000		-3				.19
115	314	40	-300	-80	-6000		-3				1.34
115	314	40	-300	-80	-6000		-3				1.83
115	314	40	-300	-80	-6000		-3				.48
115	314	40	-300	-80	-3000		-3				2.04
115	314	40	-300	-80	-3000		-3				.47
115	314	40	-300	-40	-3000		-3				.20
115	314	40	-300	-40	-3000		-3				.47
115	314	40	-300	-20	-3000		-6				.03
115	314	40	-300	-20	-3000		-3				.22
115	314	40	-300	-20	-3000		-3				1.25
115	314	40	-300	-20	-3000		-3				.05
120	304	30	-300	-80	-6000		-3				.31
120	304	30	-300	-80	-6000		-3				.34
120	314	30	-300	-60	-6000		-6				.05
120	314	30	-300	-40	-3000		-3				.08
120	314	40	-300	-80	-6000		-6				.03
120	314	40	-300	-80	-6000		-3				.20
120	314	40	-300	-80	-6000		-3				.05

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
120	314	40	-300	-80	-6000		-3				.47
120	314	40	-300	-80	-6000		-3				.48
120	314	40	-300	-80	-3000		-3				1.95
120	314	40	-300	-40	-3000		-3				.09
120	314	40	-300	-20	-3000		-6				.03
120	314	40	-300	-20	-3000		-3				.53
120	314	40	-300	-20	-3000		-3				.07
125	314	30	-300	-40	-3000		-6				.09

STEADY STATE, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	-300	0	-3000		-3	100	-100	-100	.12
BLW	314	20	-300	20	0		-3	100	-100	-100	.76
BLW	314	40	-300	-40	BELOW		6	-100	-100	-100	.09
BLW	314	50	300	-60	-6000		-3	-100	-100	-100	.23
BLW	325	30	-300	-80	-6000		-3	-100	-100	-100	.14
40	314	20	-300	20	0		-3	100	-100	-100	.76
40	314	30	-300	-60	BELOW		-3	-100	-100	-100	.36
40	314	30	-300	-60	BELOW		-3	100	-100	-100	.14
40	314	30	-300	-40	-6000		-3	100	-100	-100	.52
40	314	30	-300	-20	-6000		-3	100	-100	-100	.09
40	314	40	-300	-60	BELOW		-3	100	-100	-100	.48
40	314	40	-300	-40	BELOW		-6	100	-100	-100	.05
40	314	40	-300	-40	BELOW		-3	100	-100	-100	.30
40	314	40	-300	-40	BELOW		-3	150	-100	-100	.45
40	314	40	-300	-40	BELOW		3	100	-100	-100	.12
40	314	40	-300	-40	-6000		-3	100	-100	-100	.31
40	314	40	-300	-40	-6000		-3	150	-100	-100	.17
40	325	30	-300	-80	-6000		-3	-100	-100	-100	.04
40	325	30	300	-80	-6000		-3	-100	-100	-100	.50
40	325	40	-300	-40	-6000		-3	100	-100	-100	.24
40	325	40	300	-60	-6000		-6	-100	-100	-100	.04
60	314	20	-300	-40	-6000		-3	100	-100	-100	.09
60	314	20	-300	0	-3000		-3	-100	-100	-100	.10
60	314	20	-300	0	-3000		-3	100	-100	-100	.20
60	314	20	-300	0	0		-3	100	-100	-100	.39
60	314	20	-300	20	0		-3	100	-100	-100	.59
60	314	30	-300	-60	BELOW		-3	100	-100	-100	.52
60	314	30	-300	-40	-6000		-3	100	-100	-100	.74
60	314	30	-300	-40	-6000		-3	150	-100	-100	1.11
60	314	30	300	-40	-6000		-3	150	-100	-100	.16
60	314	40	-300	-60	BELOW		-3	100	-100	-100	.20
60	314	40	-300	-40	BELOW		-3	100	-100	-100	.22
60	314	40	-300	-20	-6000		-3	100	-100	-100	.09
60	325	20	-300	0	0		-3	-100	100	-100	.13
60	325	20	-300	20	-3000		-3	100	-100	100	.21
60	325	20	-300	20	0		-3	-100	-100	-100	.35
60	325	20	-300	20	0		-3	100	-100	-100	.19
60	325	30	-300	-80	BELOW		-3	-100	-100	-100	.18
60	325	30	-300	0	0		-3	-100	100	-100	.32
70	314	10	-300	0	0		-3	100	-100	100	.27
70	314	20	-300	0	-3000		-3	-100	-100	-100	.39
70	314	20	-300	0	-3000		-3	100	-100	-100	.98
70	314	20	-300	0	0		-3	100	-100	-100	2.63

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	20	-300	20	0	-3	100	-100	-100	.71
70	314	30	-900	-40	-6000	-3	100	-100	-100	.03
70	314	30	-300	-40	BELOW	-3	100	-100	-100	.52
70	314	30	-300	-40	-6000	-3	100	-100	-100	.52
70	314	30	-300	-40	-6000	-3	150	-100	-100	.77
70	314	30	-300	-40	-3000	-3	-100	-100	-100	.13
70	314	40	-300	-40	-6000	-3	100	-100	-100	.09
70	325	20	-300	-20	-3000	-3	100	-100	-100	.22
70	325	20	-300	-20	0	-3	-100	100	-100	.22
70	325	20	-300	0	0	-3	-100	100	-100	.42
70	325	20	-300	20	-3000	-3	100	-100	100	.21
70	325	20	-300	20	0	-3	-100	-100	-100	.28
70	325	20	-300	20	0	-3	100	-100	-100	.80
70	325	30	-300	-80	-6000	-3	-100	-100	-150	.18
70	325	30	-300	-80	-6000	-3	-100	-100	-100	.37
70	325	30	-300	-80	-6000	3	-100	-100	-100	.04
75	314	10	-300	0	0	-3	100	-100	100	.07
75	314	20	-300	-40	-6000	-3	100	-100	100	.04
75	314	20	-300	-20	-3000	-3	100	-100	-100	.21
75	314	20	-300	-20	0	-3	-100	100	-100	.68
75	314	20	-300	0	-3000	-3	-100	-100	-100	.93
75	314	20	-300	0	-3000	-3	100	-100	-100	.86
75	314	20	-300	0	-3000	-3	100	100	-100	.52
75	314	20	-300	0	-3000	-3	150	-100	-100	1.51
75	314	20	-300	0	0	-3	-100	-100	-100	1.95
75	314	20	-300	0	0	-3	-100	100	-100	.66
75	314	20	-300	0	0	-3	100	-100	-100	2.80
75	314	20	-300	20	0	-3	100	-100	-100	.51
75	314	30	-300	-60	BELOW	-3	100	-100	-100	.16
75	314	30	-300	-40	-6000	-3	-100	-100	-100	.49
75	314	30	-300	-40	-6000	-3	100	-100	-100	.12
75	314	30	-300	-40	-6000	-3	100	100	-100	.24
75	314	30	-300	-40	-6000	-3	150	-100	-100	.71
75	314	30	-300	0	-3000	-3	150	-100	-100	.29
75	314	40	-300	-60	BELOW	-3	100	-100	-100	.44
75	314	40	-300	-40	-6000	-3	100	-100	-100	.09
75	325	20	-300	-20	-3000	-3	100	-100	-100	.59
75	325	20	-300	-20	0	-3	-100	100	-100	.57
75	325	20	-300	0	-3000	-3	100	-100	-100	.07
75	325	20	-300	0	0	-3	-100	100	-100	.58
75	325	20	-300	0	0	-3	100	-100	-100	.44
75	325	20	-300	20	0	-3	-100	-100	-100	.35
75	325	20	-300	20	0	-3	100	-100	-100	1.09
75	325	30	-300	-80	BELOW	-3	-100	-100	-100	.09
75	325	30	-300	-80	-6000	-3	-100	-100	-100	.73
75	325	30	-300	-80	-6000	3	-100	-100	-100	.10
75	325	30	-300	-80	-3000	-3	-100	100	-100	.07
75	325	30	-300	-20	-3000	-3	100	-100	-100	.22
75	325	30	-300	-20	0	-6	-100	100	-100	.07
75	325	30	-300	-20	0	-3	-100	100	-100	.22
75	325	30	-300	0	0	-3	-100	100	-100	.16
80	314	20	-300	-40	-6000	-3	100	-100	-100	.04
80	314	20	-300	-20	-3000	-3	100	-100	-100	5.37
80	314	20	-300	-20	-3000	-3	150	-100	-100	.44
80	314	20	-300	-20	-3000	3	100	-100	-100	.03

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	20	-300	-20	0	-3	-100	100	-100	.22
80	314	20	-300	0	-3000	-3	-100	-100	-100	.30
80	314	20	-300	0	-3000	-3	100	-100	-100	3.70
80	314	20	-300	0	-3000	-3	100	100	-100	1.26
80	314	20	-300	0	-3000	-3	150	-100	-100	3.29
80	314	20	-300	0	0	-3	-100	-100	-100	1.76
80	314	20	-300	0	0	-3	-100	100	-100	2.70
80	314	20	-300	0	0	-3	100	-100	-100	3.54
80	314	20	-300	20	0	-3	-100	-100	-100	.39
80	314	20	-300	20	0	-3	100	-100	-100	.27
80	314	30	-300	-40	-6000	-3	100	100	-100	.21
80	314	30	-300	-40	-6000	-3	150	-100	-100	.45
80	314	30	-300	-20	0	-3	-100	100	-100	.40
80	314	30	-300	0	-3000	-3	150	-100	-100	1.20
80	314	40	-300	-60	BELOW	-3	100	100	-100	.86
80	314	40	-300	-60	-3000	3	-100	100	-100	.06
80	325	20	-300	-20	-3000	-3	100	-100	-100	1.22
80	325	20	-300	-20	0	-3	-100	100	-100	1.32
80	325	20	-300	0	-3000	-3	100	-100	-100	1.11
80	325	20	-300	0	0	-3	-100	100	-100	3.33
80	325	20	-300	0	0	-3	100	-100	-100	1.98
80	325	20	-300	20	-3000	-3	100	-100	-100	.59
80	325	20	-300	20	-3000	-3	100	-100	100	.85
80	325	20	-300	20	0	-3	-100	-100	-100	.28
80	325	20	-300	20	0	-3	100	-100	-100	.73
80	325	30	-1200	-80	-3000	-3	-100	-100	-150	.07
80	325	30	-900	-80	-6000	-3	-100	-100	-100	.13
80	325	30	-300	-80	BELOW	-3	-100	-100	-100	.66
80	325	30	-300	-80	-6000	-3	-100	-100	-100	1.42
80	325	30	-300	-80	-6000	3	-100	-100	-100	.06
80	325	30	-300	-80	-3000	-3	-100	-100	-100	.39
80	325	30	-300	-60	-3000	-3	-1[illegible]	150	-150	.21
80	325	30	-300	-20	-3000	-3	100	-100	-100	.22
80	325	30	-300	-20	0	-3	-100	100	-100	.65
80	325	30	-300	0	-3000	-3	100	-100	-100	.19
80	325	30	-300	0	0	-3	-100	100	-100	.87
80	325	40	-300	-80	BELOW	-3	-100	-100	-100	.09
80	325	40	-300	-80	-3000	-3	-100	-100	-100	.19
85	314	20	-300	-40	-6000	-3	100	-100	100	.07
85	314	20	-300	-20	-3000	-3	100	-100	-100	9.53
85	314	20	-300	-20	-3000	-3	100	100	-100	1.66
85	314	20	-300	-20	-3000	3	100	-100	-100	.03
85	314	20	-300	-20	0	-3	-100	100	-100	.37
85	314	20	-300	0	-3000	-3	100	-100	-100	16.19
85	314	20	-300	0	-3000	-3	100	100	-100	.50
85	314	20	-300	0	-3000	-3	150	-100	-100	8.94
85	314	20	-300	0	0	-3	-100	-100	-100	.66
85	314	20	-300	0	0	-3	-100	100	-100	1.52
85	314	20	-300	0	0	-3	100	-100	-100	.24
85	314	20	-300	20	0	-3	-100	-100	-100	1.46
85	314	20	-300	40	0	-3	100	-100	-100	.89
85	314	30	-600	-40	-3000	-3	-100	-100	-100	.06
85	314	30	-300	-80	-3000	-3	-100	-100	-100	1.73
85	314	30	-300	-60	-3000	-3	-100	-100	-100	1.73
85	314	30	-300	-40	BELOW	-3	150	-100	-100	.24
85	314	30	-300	-40	-6000	-3	-100	-100	-100	.92

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
85	314	30	-300	-20	0	-3	-100	100	-100	2.52
85	314	30	-300	0	-3000	-3	150	-100	-100	2.33
85	314	30	-300	0	0	-3	-100	100	-100	.69
85	314	30	300	-40	-6000	-3	150	-100	-100	.05
85	314	40	-300	-60	BELOW	-3	100	100	-100	.35
85	325	20	-300	-20	-3000	-3	100	-100	-100	.25
85	325	20	-300	-20	0	-3	-100	100	-100	1.09
85	325	20	-300	0	-3000	-3	100	-100	-100	1.66
85	325	20	-300	0	0	-3	-100	100	-100	1.94
85	325	20	-300	20	-3000	-3	100	-100	100	1.60
85	325	20	-300	20	0	-3	-100	-100	-100	1.87
85	325	20	-300	20	0	-3	100	-100	-100	3.14
85	325	20	-300	40	0	-3	100	-100	-100	.16
85	325	30	-1500	-80	-3000	-3	-100	-100	-100	.02
85	325	30	-1200	-80	-3000	-3	-100	-100	-100	.07
85	325	30	-900	-80	-6000	-3	-100	-100	-100	.10
85	325	30	-900	-60	-3000	-3	-100	-100	-100	.02
85	325	30	-300	-80	BELOW	-3	-100	-100	-100	1.70
85	325	30	-300	-80	-6000	-6	-100	-100	-100	.04
85	325	30	-300	-80	-6000	-3	-100	-100	-100	3.61
85	325	30	-300	-80	-6000	3	-100	-100	-100	.04
85	325	30	-300	-80	-3000	-3	-100	-100	-100	.22
85	325	30	-300	-60	0	-3	-100	150	-150	.27
85	325	30	-300	-20	-3000	-3	100	-100	-100	.19
85	325	30	-300	-20	0	-6	-100	100	-100	.07
85	325	30	-300	-20	0	-3	-100	100	-100	.71
85	325	30	-300	0	-3000	-3	100	-100	-100	1.52
85	325	30	-300	0	0	-3	-100	100	-100	1.52
85	325	30	-300	20	-3000	-3	100	-100	-100	.58
85	325	40	-300	-100	BELOW	-3	100	-100	-100	.27
85	325	40	-300	-80	BELOW	-3	100	-100	-100	.09
85	325	40	-300	-80	BELOW	3	-100	-100	-100	.04
85	325	40	-300	-80	-6000	-3	-100	-100	-100	.25
85	325	40	-300	-80	-6000	-3	100	-100	-100	.70
85	325	40	-300	-80	-3000	-3	-100	-100	-100	.19
90	314	20	-300	-20	-3000	-3	100	-100	-100	7.74
90	314	20	-300	-20	-3000	-3	100	100	-100	4.88
90	314	20	-300	-20	0	-3	-100	100	-100	.12
90	314	20	-300	0	-3000	-3	100	-100	-100	10.72
90	314	20	-300	0	-3000	-3	150	-100	-100	5.90
90	314	20	-300	0	0	-3	-100	-100	-100	.25
90	314	20	-300	0	0	-3	-100	100	-100	.31
90	314	20	-300	40	0	-3	100	-100	-100	3.41
90	314	30	-900	-40	-6000	-3	-100	-100	-100	.03
90	314	30	-600	-40	-3000	-3	-100	-100	-100	.06
90	314	30	-300	-80	-6000	-3	-100	-100	-100	1.73
90	314	30	-300	-60	-6000	-3	-100	-100	-100	1.05
90	314	30	-300	-60	-3000	-3	-100	-100	-150	.97
90	314	30	-300	-60	-3000	-3	-100	-100	-100	4.28
90	314	30	-300	-60	-3000	-3	-100	100	-100	.69
90	314	30	-300	-40	-6000	-3	-100	-100	-100	.20
90	314	30	-300	-20	0	-3	-100	100	-100	2.44
90	314	30	-300	0	0	-3	-100	100	-100	.64
90	314	30	300	-40	-6000	-3	-100	-100	-100	.16
90	314	40	-300	-80	-6000	-3	100	-100	-100	.59

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
90	314	40	-300	-60	BELOW	-3	100	100	-100	.16
90	314	40	-300	-60	-3000	-3	-100	100	-100	.48
90	314	40	-300	-60	-3000	3	-100	100	-100	.06
90	325	20	-300	0	-3000	-3	100	-100	-100	.19
90	325	20	-300	0	0	-3	-100	100	-100	.18
90	325	20	-300	20	0	-3	-100	-100	-100	5.35
90	325	20	-300	20	0	-3	100	-100	-100	6.78
90	325	20	-300	40	0	-3	100	-100	-100	.73
90	325	30	-900	-80	-3000	-3	-100	-100	-100	.09
90	325	30	-900	-60	-3000	-3	-100	-100	-100	.18
90	325	30	-300	-100	BELOW	-3	100	-100	-100	.85
90	325	30	-300	-80	BELOW	-3	-100	-100	-100	.94
90	325	30	-300	-80	BELOW	-3	100	-100	-100	.45
90	325	30	-300	-80	BELOW	3	100	-100	-100	.04
90	325	30	-300	-80	-6000	-6	-100	-100	-100	.04
90	325	30	-300	-80	-6000	-3	-100	-100	-100	2.30
90	325	30	-300	-80	-6000	-3	100	-100	-100	.09
90	325	30	-300	-80	-6000	3	-100	-100	-100	.08
90	325	30	-300	-80	-6000	3	100	-100	-100	.04
90	325	30	-300	-80	-3000	-3	-100	-100	-150	.09
90	325	30	-300	-80	-3000	-3	-100	-100	-100	.47
90	325	30	-300	-60	-3000	-3	-100	100	-150	.17
90	325	30	-300	-60	-3000	-3	-100	150	-150	.17
90	325	30	-300	-60	0	-3	-100	150	-150	1.44
90	325	30	-300	-20	-3000	-3	150	-100	-100	.33
90	325	30	-300	0	-3000	-3	100	-100	-100	.48
90	325	30	-300	0	-3000	-3	150	-100	-100	.26
90	325	30	-300	0	0	-3	-100	100	-100	1.02
90	325	30	-300	20	-3000	-3	100	-100	-100	.21
90	325	30	-300	20	0	-3	100	-100	-100	.14
90	325	40	-300	-100	BELOW	-3	100	-100	-100	.93
90	325	40	-300	-80	BELOW	-3	100	-100	-100	3.52
90	325	40	-300	-80	BELOW	-3	150	-100	-100	.16
90	325	40	-300	-80	-6000	-3	-100	-100	-100	.65
90	325	40	-300	-80	-6000	-3	100	-100	-100	3.17
90	325	40	-300	-80	-3000	-3	-100	-100	-150	.34
90	325	40	-300	-60	0	-3	-100	150	-150	.24
95	314	20	-300	-20	-3000	-3	100	-100	-100	1.12
95	314	20	-300	0	-3000	-3	100	-100	-100	.07
95	314	20	-300	40	0	-3	100	-100	-100	.49
95	314	30	-600	-40	-3000	-3	-100	-100	-100	.09
95	314	30	-300	-80	-6000	-3	-100	-100	-100	.09
95	314	30	-300	-60	-6000	-3	-100	-100	-100	1.99
95	314	30	-300	-60	-6000	-3	100	-100	-100	.78
95	314	30	-300	-60	-3000	-3	-100	-100	-150	.26
95	314	30	-300	-60	-3000	-3	-100	-100	-100	10.52
95	314	30	-300	-60	-3000	-3	-100	100	-150	.17
95	314	30	-300	-60	-3000	-3	-100	150	-200	.34
95	314	30	-300	-60	-3000	-3	-100	150	-150	.40
95	314	30	-300	-40	-6000	-3	-100	-100	-100	2.98
95	314	30	-300	-20	0	-3	-100	100	-100	1.27
95	314	30	-300	20	-3000	-3	100	-100	-100	.42
95	314	30	-300	20	0	-3	100	-100	-100	.49
95	314	30	-300	40	0	-3	100	-100	-100	1.25
95	314	30	300	-60	-3000	-3	-100	-100	-100	.22

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	30	300	-40	-6000	-3	-100	-100	-100	.26
95	314	40	-300	-80	-6000	-3	-100	-100	-100	2.18
95	314	40	-300	-80	-6000	-3	100	-100	-100	.78
95	314	40	-300	-80	-3000	-3	-100	-100	-100	.58
95	314	40	-300	-60	-6000	-3	-100	-100	-100	.75
95	314	40	-300	-60	-6000	-3	-100	100	-100	.03
95	314	40	-300	-60	-6000	-3	100	-100	-100	1.51
95	314	40	-300	-60	-3000	-3	-100	-100	-100	9.63
95	314	40	-300	-60	-3000	-3	-100	100	-150	1.13
95	314	40	-300	-60	-3000	-3	-100	100	-100	5.88
95	325	20	-300	20	0	-3	-100	-100	-100	4.27
95	325	20	-300	20	0	-3	100	-100	-100	1.69
95	325	20	-300	40	0	-3	100	-100	-100	2.11
95	325	30	-900	-60	-3000	-3	-100	-100	-100	.09
95	325	30	-300	-100	BELOW	-3	100	-100	-100	.04
95	325	30	-300	-80	BELOW	-3	100	-100	-100	2.42
95	325	30	-300	-80	BELOW	3	100	-100	-100	.04
95	325	30	-300	-80	-6000	-3	-100	-100	-100	.72
95	325	30	-300	-80	-6000	-3	100	-100	-100	.32
95	325	30	-300	-80	-3000	-3	-100	-100	-100	1.24
95	325	30	-300	-60	-3000	-3	-100	100	-150	.88
95	325	30	-300	-60	-3000	-3	-100	150	-150	.12
95	325	30	-300	-60	0	-3	-100	100	-150	1.12
95	325	30	-300	-60	0	-3	-100	150	-150	.95
95	325	30	-300	-40	-6000	-3	-100	-100	-100	.24
95	325	30	-300	-20	-3000	-3	100	-100	-100	.21
95	325	30	-300	20	-3000	-3	100	-100	-100	.28
95	325	30	-300	20	0	-3	100	-100	-100	.49
95	325	30	-300	40	0	-3	100	-100	-100	3.48
95	325	40	-300	-100	BELOW	-3	100	-100	-100	6.13
95	325	40	-300	-80	BELOW	-6	100	-100	-100	.04
95	325	40	-300	-80	BELOW	-3	100	-100	-100	3.77
95	325	40	-300	-80	BELOW	3	100	-100	-100	.04
95	325	40	-300	-80	-6000	-3	100	-100	-100	3.52
95	325	40	-300	-80	-3000	-3	-100	-100	-150	.39
95	325	40	-300	-60	-3000	-3	-100	100	-150	.40
95	325	40	-300	-60	0	-3	-100	100	-150	.45
95	325	40	-300	-60	0	-3	-100	150	-150	2.49
100	314	30	-300	-80	-3000	-3	-100	-100	-100	.15
100	314	30	-300	-60	-6000	-3	-100	-100	-100	1.11
100	314	30	-300	-60	-3000	-3	-100	-100	-100	11.34
100	314	30	-300	20	0	-3	100	-100	-100	.46
100	314	30	-300	40	0	-3	100	-100	-100	3.34
100	314	40	-300	-80	-6000	-3	-100	-100	-100	.45
100	314	40	-300	-80	-6000	-3	100	-100	-100	1.27
100	314	40	-300	-80	-6000	-3	150	-100	-100	.83
100	314	40	-300	-80	-3000	-3	-100	-100	-100	.17
100	314	40	-300	-60	-6000	-3	-100	-100	-100	4.42
100	314	40	-300	-60	-6000	-3	100	-100	-100	7.80
100	314	40	-300	-60	-3000	-3	-100	-100	-150	.53
100	314	40	-300	-60	-3000	-3	-100	-100	-100	13.66
100	314	40	-300	-60	-3000	-3	-100	100	-150	2.10
100	314	40	-300	-60	-3000	-3	-100	100	-100	1.19
100	314	40	-300	-60	-3000	-3	100	-100	-100	1.23
100	314	40	-300	-40	-6000	-3	-100	-100	-100	.17

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
100	314	40	-300	-40	-6000		6	-100	-100	-100	.03
100	314	40	300	-80	-3000		-3	-100	-100	-100	.09
100	325	20	-300	40	0		-3	100	-100	-100	.16
100	325	30	-300	-80	BELOW		-3	100	-100	-100	.27
100	325	30	-300	-60	0		-3	-100	150	-100	.26
100	325	30	-300	20	-3000		-3	100	-100	-100	1.64
100	325	30	-300	20	0		-3	-100	-100	-100	.14
100	325	30	-300	20	0		-3	100	-100	-100	3.92
100	325	30	-300	20	0		-3	150	-100	-100	.07
100	325	30	-300	40	0		-3	100	-100	-100	3.21
100	325	40	-300	-100	BELOW		-3	150	-100	-100	.09
100	325	40	-300	-80	BELOW		-6	100	-100	-100	.04
100	325	40	-300	-60	-3000		-3	-100	-100	-150	.24
100	325	40	-300	-60	-3000		-3	-100	100	-150	.52
105	314	30	-300	-60	-6000		-3	-100	-100	-100	.57
105	314	30	-300	20	0		-3	100	-100	-100	1.40
105	314	30	-300	40	0		-3	100	-100	-100	1.12
105	314	40	-300	-60	-6000		-3	-100	-100	-100	1.47
105	314	40	-300	-60	-6000		-3	100	-100	-100	13.73
105	314	40	-300	-60	-3000		-3	-100	-100	-150	.34
105	314	40	-300	-60	-3000		-3	-100	-100	-100	4.85
105	314	40	-300	-60	-3000		-3	100	-100	-100	1.73
105	314	40	-300	-40	-6000		-3	150	-100	-100	.29
105	314	40	-300	-40	-6000		-3	150	100	-100	.24
105	325	30	-300	20	0		-6	100	-100	-100	.03
105	325	30	-300	20	0		-3	-100	-100	-100	.28
105	325	30	-300	20	0		-3	100	-100	-100	1.00
105	325	30	-300	40	0		-3	100	-100	-100	.22
110	325	30	-300	20	0		-6	100	-100	-100	.03
110	325	30	-300	20	0		-3	100	-100	-100	.49
90	314	30	-300	-60	-6000		-3				.10
95	314	30	-300	-60	-6000		-3				.41
95	314	30	-300	-60	-6000		-3				.19
95	314	30	-300	-40	-3000		-3				.25
95	314	30	-300	-20	-3000		-3				.34
95	314	40	-300	-60	-6000		-3				.10
100	314	30	-300	-60	-6000		-3				.12
100	314	30	-300	-60	-6000		-3				.36
100	314	30	-300	-60	-6000		-3				.40
100	314	30	-300	-60	-6000		6				.02
100	314	30	-300	-40	-6000		-3				.22
100	314	30	-300	-40	-3000		-3				.54
100	314	30	-300	-20	-3000		-3				.90
100	314	40	-300	-40	-3000		-3				.22
100	314	40	-300	-40	-3000		-3				.14
100	314	40	-300	-40	-3000		-3				.06
100	325	30	-300	-40	-3000		-3				.41
105	314	30	-300	-60	-6000		-3				.34
105	314	30	-300	-60	-6000		-3				1.60
105	314	30	-300	-60	-6000		-3				.95
105	314	30	-300	-60	-6000		6				.02
105	314	30	-300	-40	-6000		-3				1.09
105	314	30	-300	-40	-3000		-3				.45
105	314	30	-300	-20	-3000		-3				.90
105	314	30	-300	-20	-3000		-3				.30
105	314	30	-300	-20	-3000		-3				.47

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
105	314	30	-300	-20	-3000		-3				.59
105	314	40	-300	-60	-6000		-3				.22
105	314	40	-300	-60	-6000		-3				.17
105	314	40	-300	-60	-6000		6				.03
105	314	40	-300	-40	-6000		-3				.21
105	314	40	-300	-40	-3000		-3				.32
105	314	40	-300	-40	-3000		-3				1.36
105	314	40	-300	-40	-3000		-3				.15
105	314	40	-300	-40	-3000		-3				2.49
105	314	40	-300	-40	-3000		-3				.31
105	314	40	-300	-40	-3000		-3				.41
105	314	40	-300	-20	-3000		-3				.17
105	314	40	-300	-20	-3000		6				.03
105	325	40	-300	-40	-3000		-3				.50
110	314	30	-300	-60	-6000		-6				.03
110	314	30	-300	-60	-6000		-3				4.53
110	314	30	-300	-60	-6000		-3				.81
110	314	30	-300	-60	-6000		-3				.09
110	314	30	-300	-60	-6000		-3				1.11
110	314	30	-300	-60	-6000		-3				.59
110	314	30	-300	-60	-6000		-3				1.53
110	314	30	-300	-40	-6000		-3				1.24
110	314	30	-300	-40	-3000		-3				1.14
110	314	30	-300	-40	-3000		-3				.22
110	314	30	-300	-20	-3000		-3				.81
110	314	30	-300	-20	-3000		-3				.62
110	314	30	-300	-20	-3000		-3				.47
110	314	30	-300	-20	-3000		-3				.10
110	314	40	-300	-60	-6000		-6				.03
110	314	40	-300	-60	-6000		-3				2.04
110	314	40	-300	-60	-6000		-3				2.83
110	314	40	-300	-60	-6000		6				.03
110	314	40	-300	-40	-6000		-3				4.84
110	314	40	-300	-40	-6000		-3				.68
110	314	40	-300	-40	-3000		-3				.32
110	314	40	-300	-40	-3000		-3				.65
110	314	40	-300	-40	-3000		-3				7.50
110	314	40	-300	-40	-3000		-3				3.31
110	314	40	-300	-40	-3000		-3				.67
110	314	40	-300	-40	-3000		-3				1.69
110	314	40	-300	-20	-3000		-3				.29
110	314	40	-300	-20	-3000		-3				2.34
110	314	40	-300	-20	-3000		-3				.60
110	314	40	-300	-20	-3000		-3				.53
110	314	40	-300	-20	-3000		6				.03
115	314	30	-300	-60	-6000		-6				.05
115	314	30	-300	-60	-6000		-3				1.22
115	314	30	-300	-60	-6000		-3				.72
115	314	30	-300	-60	-6000		-3				.31
115	314	30	-300	-60	-6000		-3				.96
115	314	30	-300	-60	-6000		6				.03
115	314	30	-300	-40	-6000		-3				.84
115	314	30	-300	-40	-3000		-3				.12
115	314	30	-300	-20	-3000		-3				.38
115	314	40	-300	-60	-6000		-6				.03
115	314	40	-300	-60	-6000		-3				8.85

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
115	314	40	-300	-60	-6000		-3				.40
115	314	40	-300	-60	-6000		-3				1.47
115	314	40	-300	-40	-6000		-3				2.12
115	314	40	-300	-40	-6000		-3				2.09
115	314	40	-300	-40	-6000		-3				.76
115	314	40	-300	-40	-3000		-6				.03
115	314	40	-300	-40	-3000		-3				.28
115	314	40	-300	-40	-3000		-3				6.46
115	314	40	-300	-40	-3000		-3				.24
115	314	40	-300	-40	-3000		-3				2.93
115	314	40	-300	-40	-3000		-3				.21
115	314	40	-300	-40	-3000		3				.03
115	314	40	-300	-20	-3000		-3				3.24
115	314	40	-300	-20	-3000		-3				.67
120	314	30	-300	-60	-6000		-3				.67
120	314	30	-300	-60	-6000		6				.03
120	314	30	-300	-40	-3000		-3				.12
120	314	40	-300	-60	-6000		-3				.66
120	314	40	-300	-60	-6000		-3				.47
120	314	40	-300	-40	-3000		-6				.03
120	314	40	-300	-40	-3000		-3				.41
120	314	40	-300	-40	-3000		-3				.05
120	314	40	-300	-40	-3000		3				.03
120	314	40	-300	-20	-3000		-3				.96
120	314	40	-300	-20	-3000		-3				.61
120	314	40	-300	-20	-3000		-3				1.09
125	314	40	-300	-40	-3000		-3				.05
80		20	-300	0	0		-3	100	100	-100	.05
80		20	-300	20	0		-3	100	100	-100	.83
80		20	-300	20	0		-3	150	100	-100	1.30
85		20	-300	0	0		-3	100	100	-100	.28
85		20	-300	20	0		-3	100	100	-100	1.34
85		20	-300	20	0		-3	100	150	-100	.12
85		20	-300	20	0		-3	150	100	-100	1.24
85		20	-300	20	0		-3	150	150	-100	.09
85		30	-300	0	0		-3	100	100	-100	2.18
85		30	-300	0	0		-3	150	100	-100	.21
85		30	-300	20	0		-3	100	150	-150	.17
90		20	-300	0	0		-3	100	100	-100	.41
90		20	-300	0	0		-3	100	150	-100	.72
90		20	-300	20	0		-3	100	100	-150	.88
90		20	-300	20	0		-3	100	100	-100	2.29
90		20	-300	20	0		-3	100	150	-100	1.24
90		20	-300	20	0		-3	150	100	-100	.06
90		20	-300	20	0		-3	150	150	-100	.82
90		30	-300	0	0		-3	150	100	-100	.40
90		30	-300	20	0		-3	100	100	-100	.52
90		30	-300	20	0		-3	100	150	-150	.17
90		30	-300	20	0		-3	150	100	-100	.21
95		20	-300	20	0		-3	100	100	-100	.89
95		20	-300	20	0		-3	150	100	-100	.38
95		30	-300	0	0		-3	100	100	-100	.40
95		30	-300	20	0		-3	100	100	-100	.26
95		30	-300	20	0		-3	100	150	-150	.76
95		30	-300	20	0		-3	150	100	-150	.10

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95		30	-300	20	0	-3	150	100	-100	.43
95		30	-300	20	0	-3	150	150	-150	1.41
100		30	-300	0	0	-3	100	150	-150	.70
100		30	-300	20	0	-3	100	100	-150	.15
100		30	-300	20	0	-3	100	100	-100	.22
100		30	-300	20	0	-3	100	150	-150	3.52
100		30	-300	20	0	-3	100	150	-100	.19
105		30	-300	0	0	-3	150	100	-150	.15
105		30	-300	20	0	-3	100	100	-150	.27
105		30	-300	20	0	-3	100	150	-150	.70

STEADY STATE, LEVEL FLIGHT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	20	-300	-20	-3000	-3	150	-100	-100	.54
40	314	20	-300	0	-3000	-3	100	-100	-100	.07
40	314	20	-300	0	-3000	-3	150	-100	-100	.12
40	314	30	-300	0	-3000	-3	-100	-100	-100	.21
40	314	30	-300	0	-3000	-3	150	-100	-100	.55
40	314	30	-300	0	-3000	-3	200	-100	-100	.19
40	325	20	-600	0	-3000	-3	100	-100	-100	.12
40	325	20	-300	-20	-3000	-3	-100	-100	-100	1.04
60	314	20	-300	-20	-3000	-3	150	-100	-100	.65
60	314	20	-300	0	-3000	-3	-100	-100	-100	.87
60	314	20	-300	0	-3000	-3	100	-100	-100	.46
60	314	20	-300	0	-3000	-3	150	-100	-100	.38
60	314	30	-300	-60	-6000	-3	-100	-100	-100	.66
60	314	30	-300	-20	-3000	-3	100	-100	-100	.27
60	314	30	-300	0	-3000	-3	150	-100	-100	.10
60	325	30	-300	-20	-3000	-3	100	-100	-100	.20
70	314	20	-300	-20	-3000	-3	100	-100	-100	.37
70	314	20	-300	-20	-3000	-3	150	-100	-100	1.30
70	314	20	-300	0	-3000	-3	-100	-100	-100	.26
70	314	20	-300	0	-3000	-3	100	-100	-100	.61
70	314	20	-300	0	-3000	-3	150	-100	-100	.19
70	314	30	-300	-60	-6000	-3	-100	-100	-100	.43
70	314	30	-300	-20	-3000	-3	150	-100	-100	.27
70	314	30	-300	0	-3000	-3	150	-100	-100	.90
70	314	30	300	0	-3000	-3	150	-100	-100	.19
70	325	30	-300	-80	BELOW	-3	-100	-100	-100	.16
75	314	20	-600	0	-3000	-3	150	-100	-100	.29
75	314	20	-300	-20	-3000	-3	100	-100	-100	1.08
75	314	20	-300	-20	-3000	-3	150	-100	-100	.60
75	314	20	-300	0	-3000	-3	-100	-100	-100	.42
75	314	20	-300	0	-3000	-3	100	-100	-100	2.03
75	314	20	-300	0	-3000	-3	150	-100	-100	.70
75	314	20	-300	0	0	-3	100	-100	-100	.19
75	314	20	-300	0	0	-3	100	100	-100	.35
75	314	20	300	0	-3000	-3	100	100	-100	.54
75	314	30	-300	-60	-6000	-3	-100	-100	-100	.13
75	314	30	-300	-20	-3000	-3	150	-100	-100	.29
75	314	30	-300	0	-3000	-3	150	-100	-100	.40
75	325	30	-300	-80	-6000	-3	-100	-100	-100	.23
80	314	10	-300	0	0	-3	100	-100	-100	.42

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
80	314	20	-300	-20	-3000		-3	100	-100	-100	.27
80	314	20	-300	0	-3000		-3	-100	-100	-100	.58
80	314	20	-300	0	-3000		-3	-100	100	-100	.35
80	314	20	-300	0	0		-3	100	-100	-100	.27
80	314	20	-300	0	0		-3	100	100	-100	.33
80	314	20	-300	0	0		-3	150	100	-100	.10
80	314	20	-300	20	0		-3	150	100	-100	1.24
80	314	20	300	0	-3000		-3	100	100	-100	.10
80	314	30	-300	0	-3000		-3	150	-100	-100	1.61
80	314	30	-300	0	-3000		-3	150	100	-100	.31
80	325	30	-300	-80	BELOW		-3	100	-100	-100	1.86
80	325	30	-300	-20	-3000		-3	100	-100	-100	.20
80	325	40	-300	-80	BELOW		-3	100	-100	-100	.16
85	314	20	-300	0	-3000		-3	100	100	-100	.03
85	314	20	-300	0	-3000		-3	150	-100	-100	.12
85	314	20	-300	0	-3000		-3	150	100	-100	.10
85	314	20	-300	0	0		-3	100	-100	-100	2.44
85	314	30	-300	-60	-6000		-3	-100	-100	-100	.13
85	314	30	-300	-40	-6000		-3	150	-100	-100	.24
85	314	30	-300	0	-3000		-3	150	-100	-100	.47
85	314	30	-300	0	-3000		-3	150	100	-100	.21
85	314	40	-300	-60	-6000		-3	-100	100	-100	.10
85	325	30	-300	-80	BELOW		-3	100	-100	-100	1.61
85	325	40	-300	-80	BELOW		-3	100	-100	-100	.83
90	314	20	-300	0	0		-3	100	-100	-100	.85
90	314	30	-300	-40	-6000		-3	150	-100	-100	.47
90	314	30	-300	-20	-3000		-3	-100	100	-100	.29
90	314	40	-300	-20	-3000		-3	100	-100	-100	.28
95	314	30	-300	-40	-6000		-3	100	-100	-100	.34
95	314	30	-300	-40	-6000		-3	150	-100	-100	1.49
95	314	30	-300	-40	-6000		-3	150	100	-100	.30
95	314	30	-300	-40	-3000		-3	-100	-100	-100	.86
95	314	30	-300	-40	-3000		-3	-100	100	-100	.48
95	314	30	-300	-40	-3000		-3	100	-100	-100	2.53
95	314	30	-300	-20	-3000		-3	-100	100	-100	.29
95	314	40	-300	-60	-6000		-3	-100	100	-100	.10
95	314	40	-300	-40	-3000		-3	100	-100	-100	.57
95	314	40	-300	-20	-3000		-3	100	-100	-100	1.45
95	325	30	-300	-20	-3000		-3	-100	100	-100	.34
100	314	30	-300	-40	-6000		-3	-100	-100	-100	.07
100	314	30	-300	-40	-6000		-3	100	-100	-100	1.17
100	314	30	-300	-40	-6000		-3	100	100	-100	.69
100	314	30	-300	-40	-6000		-3	150	-100	-100	3.01
100	314	30	-300	-40	-3000		-3	-100	-100	-100	4.22
100	314	30	-300	-40	-3000		-3	-100	100	-150	1.60
100	314	30	-300	-40	-3000		-3	-100	100	-100	18.95
100	314	30	-300	-40	-3000		-3	100	-100	-100	1.52
100	314	30	-300	-20	-3000		-3	-100	100	-150	1.05
100	314	30	-300	-20	-3000		-3	-100	100	-100	8.35
100	314	30	-300	-20	-3000		-3	100	-100	-150	.16
100	314	30	-300	-20	-3000		-3	100	-100	-100	3.53
100	314	30	-300	-20	-3000		-3	100	100	-100	.52
100	314	40	-300	-60	BELOW		-3	150	-100	-100	.90
100	314	40	-300	-40	BELOW		-3	150	-100	-100	.12
100	314	40	-300	-40	-6000		-3	100	-100	-100	.16

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
100	314	40	-300	-40	-6000	-3	150	-100	-100	1.21
100	314	40	-300	-40	-3000	-3	100	-100	-100	1.60
100	314	40	-300	-20	-3000	-3	-100	100	-100	.33
100	314	40	-300	-20	-3000	-3	100	-100	-100	.81
100	314	40	-300	-20	-3000	-3	100	100	-150	.86
100	325	40	-300	-20	-3000	-3	100	100	-100	.53
105	314	30	-300	-60	BELOW	-3	-100	100	-100	.17
105	314	30	-300	-60	-6000	-3	-100	100	-100	.12
105	314	30	-300	-40	-6000	-3	-100	100	-100	1.02
105	314	30	-300	-40	-6000	-3	100	-100	-100	1.22
105	314	30	-300	-40	-6000	-3	100	100	-100	.48
105	314	30	-300	-40	-3000	-3	-100	-100	-100	.22
105	314	30	-300	-40	-3000	-3	-100	100	-150	.45
105	314	30	-300	-40	-3000	-3	-100	100	-100	2.12
105	314	30	-300	-40	-3000	-3	100	-100	-100	.92
105	314	30	-300	-20	-3000	-3	-100	100	-150	.76
105	314	30	-300	-20	-3000	-3	100	-100	-100	.64
105	314	40	-300	-80	BELOW	-3	-100	100	-100	.17
105	314	40	-300	-60	BELOW	-3	-100	-100	-100	.28
105	314	40	-300	-60	BELOW	-3	-100	100	-100	3.61
105	31[illegible]	40	-300	-60	BELOW	-3	150	-100	-100	.45
105	314	40	-300	-60	BELOW	-3	200	-100	-100	.52
105	314	40	-300	-60	-6000	-3	-100	100	-100	4.01
105	314	40	-300	-60	-6000	-3	-100	150	-100	.36
105	314	40	-300	-40	BELOW	-3	150	-100	-100	1.93
105	314	40	-300	-40	-6000	-3	-100	100	-100	3.56
105	314	40	-300	-40	-6000	-3	150	-100	-100	4.15
105	314	40	-300	-40	-6000	-3	150	100	-100	1.07
105	314	40	-300	-40	-3000	-3	100	-100	-100	.28
105	314	40	-300	-20	-3000	-3	-100	100	-100	.17
105	314	40	300	-40	BELOW	-3	200	-100	-100	.10
110	314	30	-300	-40	-6000	-3	-100	150	-100	.69
110	314	30	-300	-20	-3000	-3	100	-100	-100	.33
110	314	40	-1500	-40	BELOW	-3	150	-100	-100	.03
110	314	40	-300	-80	BELOW	-3	-100	-100	-100	.78
110	314	40	-300	-80	BELOW	-3	-100	100	-100	.78
110	314	40	-300	-80	BELOW	-3	100	-100	-100	.60
110	314	40	-300	-80	BELOW	-3	100	100	-100	.53
110	314	40	-300	-60	BELOW	-3	-100	100	-100	3.63
110	314	40	-300	-60	BELOW	-3	100	-100	-100	1.30
110	314	40	-300	-60	BELOW	-3	100	100	-100	1.55
110	314	40	-300	-60	BELOW	-3	150	-100	-100	.91
110	314	40	-300	-60	BELOW	-3	200	-100	-100	.22
110	314	40	-300	-60	-6000	-3	-100	-100	-100	.30
110	314	40	-300	-60	-6000	-3	-100	100	-100	7.76
110	314	40	-300	-60	-6000	-3	-100	150	-100	1.31
110	314	40	-300	-40	BELOW	-3	150	-100	-100	3.00
110	314	40	-300	-40	BELOW	-3	200	-100	-100	2.86
110	314	40	-300	-40	-6000	-3	-100	100	-150	.34
110	314	40	-300	-40	-6000	-3	-100	100	-100	17.77
110	314	40	-300	-40	-6000	-3	-100	150	-100	1.53
110	314	40	-300	-40	-6000	-3	150	-100	-100	6.57
110	314	40	-300	-40	-6000	-3	150	100	-100	.47
110	314	40	-300	-40	-6000	-3	200	-100	-100	2.72
115	314	30	-300	-40	-6000	-3	-100	100	-100	.52

TABLE LXXXIII - Continued

STEADY STATE, LEVEL FLIGHT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
115	314	40	-300	-60	BELOW		-3	-100	-100	-100	.50
115	314	40	-300	-60	BELOW		-3	-100	100	-100	.70
115	314	40	-300	-60	BELOW		-3	100	-100	-100	.95
115	314	40	-300	-60	BELOW		-3	200	-100	-100	3.14
115	314	40	-300	-60	-6000		-3	-100	-100	-100	.17
115	314	40	-300	-60	-6000		-3	-100	100	-100	1.25
115	314	40	-300	-40	BELOW		-3	150	-100	-100	.96
115	314	40	-300	-40	BELOW		-3	200	-100	-100	2.00
115	314	40	-300	-40	-6000		-3	-100	100	-100	4.07
115	314	40	-300	-40	-6000		-3	-100	150	-100	.60
115	314	40	-300	-40	-6000		-3	150	-100	-100	2.09
115	314	40	-300	-40	-6000		-3	150	100	-100	.29
115	314	40	-300	-40	-6000		-3	200	-100	-100	3.62
120	314	40	-300	-60	BELOW		-3	-100	100	-100	.26

STEADY STATE, DESCENT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
40	314	10	-1500	-20	-3000		-6	-100	-100	150	.19
40	314	20	-600	-40	-3000		-6	-100	-100	-100	.09
40	314	20	-600	-40	-3000		-3	-100	-100	100	.09
40	314	20	-600	-40	-3000		3	-100	100	-100	.02
40	325	20	-300	-20	-3000		-3	-100	-100	-100	.34
60	314	10	-900	-80	-6000		-3	-100	-100	-100	.20
60	314	10	-300	-20	-3000		-3	-100	-100	-100	.43
60	314	20	-1500	-20	-3000		-3	-100	-100	-100	.02
60	314	20	-1500	-20	-3000		6	-100	-100	100	.04
70	314	10	-1500	-20	-3000		-3	-100	-100	150	.15
70	314	10	-300	-20	-3000		-3	-100	-100	-100	.09
70	314	20	-600	-80	-6000		-3	-100	-100	-100	.13
70	314	20	-600	-80	-6000		-3	-100	100	-100	.08
75	314	10	-1500	-20	-3000		6	-100	-100	100	.04
75	314	10	-300	-20	-3000		-3	-100	-100	-100	.09
75	314	20	-600	-80	-6000		-3	-100	100	-100	.08
75	314	20	-600	-20	-3000		-3	-250	-100	-100	.29
75	314	20	-300	-20	-3000		-3	-100	-100	-100	.26
75	314	30	-600	-80	-6000		-3	-100	-100	-100	.09
80	314	10	-1500	-20	-3000		-3	-100	-100	200	.23
80	314	10	-600	-20	-3000		-3	-250	-100	-100	.63
80	314	20	-600	-20	-3000		-3	-250	-100	-100	.32
80	314	20	-300	-20	-3000		-3	-250	-100	-100	.68
80	314	30	-600	-80	-6000		-3	-100	-100	-100	.09
80	325	10	-600	-20	-3000		-3	-250	-100	-100	.56
80	325	20	-300	-20	-3000		-3	-250	-100	-100	.46
85	314	10	-1500	-20	-3000		-3	-100	-100	100	.09
85	314	20	-300	-20	-3000		-3	-100	-100	-100	.14
90	314	20	-1200	-40	-3000		-3	-100	-100	100	.65
95	314	20	-1200	-40	-3000		-3	-100	-100	100	.13
95	314	20	-300	-20	-3000		-3	-100	-100	-100	.14

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-600	-60	BELOW	-3	-100	-100	-100	.14
BLW	314	20	-300	-80	BELOW	-6	-100	-100	-100	.09
BLW	314	20	-300	-80	BELOW	-3	-100	-100	-100	.17
BLW	314	20	-300	0	0	-3	-100	-100	-100	.16
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.05
BLW	314	30	-300	-60	-6000	-3	100	-100	-100	.25
BLW	314	30	-300	0	0	-3	100	-100	-100	.09
BLW	325	20	-300	-20	0	-3	-100	100	-100	.09
40	314	10	-900	-80	-6000	-6	-100	-100	100	.11
40	314	10	-900	-80	-6000	-3	-100	-100	150	.05
40	314	10	-600	-20	-3000	-3	-100	-100	100	.09
40	314	10	-300	-80	BELOW	-3	-100	-100	-100	.17
40	314	20	-600	-80	BELOW	-3	-100	-100	-100	.17
40	314	20	-600	-80	BELOW	-3	-100	-100	100	.15
40	314	20	-600	-60	-6000	-3	-100	-100	-100	.72
40	314	20	-600	-20	-3000	3	-100	-100	-100	.04
40	314	20	-300	-80	-6000	-6	-100	-100	100	.07
40	314	20	-300	-80	-6000	-3	-100	-100	-100	.11
40	314	20	-300	-60	-6000	-3	-100	-100	-100	.18
40	325	10	-600	0	-3000	-3	100	-100	100	.12
40	325	10	-600	0	-3000	-3	100	-100	150	.12
40	325	10	-600	20	-3000	-3	-100	-100	150	.11
40	325	10	-300	-20	0	-6	-100	100	-100	.10
40	325	10	-300	-20	0	-3	-100	-100	-100	.26
40	325	10	-300	-20	0	-3	-100	100	-100	.14
40	325	20	-900	-80	BELOW	-3	-100	-100	-100	.13
40	325	20	-600	-80	BELOW	-3	-100	-100	-100	.14
40	325	20	-300	-20	0	-3	-100	-100	-100	1.12
60	314	10	-600	-60	-6000	-3	-100	-100	150	.16
60	314	10	-600	-20	-3000	-6	-100	-100	100	.05
60	314	10	-300	-60	-6000	-3	-100	-100	100	.22
60	314	20	-900	-80	-6000	-6	-100	-100	100	.07
60	314	20	-600	-80	BELOW	-6	-100	-100	100	.06
60	314	20	-600	-60	-6000	-3	-100	-100	-100	.29
60	314	20	-600	-20	-3000	3	-100	-100	-100	.04
60	314	20	-300	-60	-6000	-3	-100	-100	-100	.16
60	325	BLW	-900	20	0	-3	-100	-100	250	.08
60	325	10	-1200	-40	-3000	-3	-100	-100	150	.21
60	325	10	-1200	-20	-3000	-6	-100	-100	-100	.12
60	325	10	-600	0	-3000	-3	100	-100	150	.15
60	325	10	-600	20	-3000	-3	-100	-100	200	.19
60	325	10	-300	-20	0	-3	-100	-100	-100	.26
60	325	10	-300	0	-3000	-3	100	-100	100	.13
60	325	10	-300	0	-3000	6	100	-100	150	.02
60	325	20	-900	-80	BELOW	-3	-100	-100	100	.13
60	325	20	-900	-60	BELOW	-6	-100	-100	100	.12
60	325	20	-600	-100	BELOW	-3	-100	-100	-100	.09
60	325	20	-600	-80	BELOW	-3	-100	-100	-100	.27
60	325	20	-600	-60	-6000	-3	-100	-100	-100	.15
60	325	20	-300	-20	0	-3	-100	-100	-100	.48
60	325	20	-300	-20	0	-3	-100	100	-100	.10
70	314	10	-600	-60	-6000	-6	-100	-100	150	.09
70	314	20	-900	-60	-6000	-3	-100	-100	-100	.05
70	314	20	-600	-80	BELOW	-6	-100	-100	100	.06
70	314	20	-600	-60	-6000	-3	-100	-100	-100	.13
70	314	20	-600	-20	-3000	-9	-100	-100	-100	.02

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	20	-300	-20	0	-3	-100	100	-100	.12
70	325	BLW	-900	20	0	-3	-100	-100	250	.08
70	325	10	-1200	-20	-3000	-6	-100	-100	100	.04
70	325	10	-600	20	0	-3	-100	-100	200	.19
70	325	10	-300	0	-3000	-3	100	-100	100	.06
70	325	20	-600	-80	BELOW	-3	-100	-100	-100	.09
70	325	20	-60[illegible]	-60	-6000	-3	-100	-100	-100	.17
75	314	10	-3[illegible]	0	-3000	-3	150	-100	-100	.0[illegible]
75	314	20	-9[illegible]	-60	-6000	-3	-100	-100	-100	.25
75	314	20	-600	-60	-6000	-3	-100	-100	-100	.25
75	314	20	-600	-60	-6000	-3	-100	-100	100	.09
75	314	20	-300	-60	-6000	-3	-100	-100	-100	.16
75	325	10	-1200	-60	-3000	-3	-100	-100	150	.21
75	325	10	-1200	-20	-3000	-6	-100	-100	100	.04
75	325	10	-900	20	0	-3	-100	-100	150	.40
75	325	10	-900	20	0	-3	-100	-100	250	.08
75	325	10	-600	0	-3000	-3	150	-100	100	.24
75	325	10	-600	20	0	-3	-100	-100	200	.28
75	325	10	-300	0	-3000	-3	100	-100	100	.13
75	325	10	-300	0	-3000	6	100	-100	150	.02
75	325	20	-900	-80	BELOW	-3	-100	-100	100	.18
75	325	20	-600	-100	BELOW	-3	-100	-100	-100	.04
75	325	20	-600	-20	0	-3	-250	-100	-100	.39
80	314	10	-300	0	-3000	-3	150	-100	100	.09
80	314	20	-900	-60	BELOW	-6	-100	-100	100	.12
80	314	20	-900	-60	-6000	-3	-100	-100	-100	.10
80	314	20	-600	-80	BELOW	-3	-100	-100	100	.08
80	314	20	-600	-60	-6000	-3	-100	-100	-100	.27
80	314	20	-300	-60	-6000	-3	-100	-100	-100	.14
80	314	20	-300	-20	0	-3	-200	-100	-100	1.17
80	325	10	-1200	-60	-3000	-3	-100	-100	150	.04
80	325	10	-1200	-20	-3000	-3	100	-100	150	.09
80	325	10	-900	-20	0	-3	-100	100	-100	.05
80	325	10	-300	0	-3000	-6	100	-100	150	.05
80	325	20	-1200	-20	-3000	-3	-100	-100	100	.10
80	325	20	-900	-20	0	-3	-100	100	-100	.17
80	325	20	-600	-100	BELOW	-3	-100	-100	-100	.10
80	325	20	-600	-60	-6000	-3	-100	-100	-100	.13
80	325	20	-600	-20	0	-3	-250	-100	-100	.53
80	325	20	-300	-20	-3000	-3	-100	100	-100	.09
85	314	10	-1500	0	3000	-3	-100	-100	-100	.12
85	314	10	-300	0	-3000	-3	150	-100	100	.09
85	314	20	-900	-80	BELOW	-3	-100	-100	-100	.09
85	314	20	-900	-60	BELOW	-6	-100	-100	100	.04
85	314	20	-900	-60	-6000	-3	-100	-100	-100	.10
85	314	20	-900	0	3000	-3	-100	-100	-100	.31
85	314	20	-600	-80	BELOW	-3	-100	-100	100	.08
85	314	20	-300	-60	-6000	-3	-100	-100	-100	.09
85	314	20	-300	-20	-3000	-3	100	100	-100	.07
85	314	20	-300	-20	0	-3	-100	100	-100	.07
85	325	10	-900	-20	0	-3	-100	100	-100	.14
85	325	10	-600	0	-3000	-3	150	-100	100	.34
85	325	20	-1200	-60	-3000	-3	-100	-100	150	.04
85	325	20	-900	-80	BELOW	-3	-100	-100	100	.18
85	325	20	-900	-20	-3000	-3	100	-100	-100	.09
85	325	20	-900	-20	0	-3	-100	100	-100	.17

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
85	325	20	-300	-20	-3000	3	100	100	-100	.03
85	325	20	-300	-20	0	-3	-100	100	-100	.40
85	325	30	-600	-80	BELOW	-3	-100	-100	-100	.27
85	325	30	-600	-60	-6000	-3	-100	-100	-150	.15
90	314	10	-1500	-20	3000	-3	-100	-100	-100	.12
90	314	20	-1500	-40	-3000	-3	-100	-100	-100	.09
90	314	20	-1500	-20	0	-3	-100	-100	-100	.13
90	314	20	-1200	-60	-3000	-6	-100	-100	150	.07
90	314	20	-900	-80	BELOW	-3	-100	-100	-100	.09
90	314	20	-900	-60	BELOW	-6	-100	-100	150	.04
90	314	20	-900	0	3000	-3	-100	-100	-100	.65
90	314	20	-600	-80	BELOW	-3	-100	-100	100	.12
90	314	20	-600	-60	-6000	-3	-100	-100	-100	.18
90	314	20	-600	-20	-3000	-3	100	-100	-100	.10
90	314	20	-300	-20	-3000	-3	100	100	-100	.36
90	314	20	-300	0	-3000	-3	100	-100	-100	.27
90	314	30	-900	-80	BELOW	-3	100	-100	-100	.26
90	314	30	-600	-60	-3000	-3	-100	-100	-150	.17
90	314	30	-600	-60	-3000	-3	-100	-100	-100	.27
90	314	30	-600	-60	-3000	-3	-100	100	-150	.17
90	314	30	-300	-60	-6000	-3	-100	-100	-100	.09
90	325	10	-900	-20	0	-3	-100	100	-100	.05
90	325	20	-900	-80	BELOW	-3	100	-100	100	.13
90	325	20	-900	-80	-6000	-3	-100	-100	-100	.18
90	325	20	-900	-20	-3000	-3	-100	-100	-100	.09
90	325	20	-600	0	-3000	-3	150	-100	-100	.15
90	325	20	-300	-20	-3000	-3	100	100	-100	.94
90	325	20	-300	-20	-3000	3	100	100	-100	.10
90	325	20	-300	-20	0	-3	-100	100	-100	.23
90	325	30	-600	-100	BELOW	-3	100	-100	-100	.70
95	314	10	-1500	-20	0	-3	-100	-100	-100	.18
95	314	20	-2100	-60	-6000	-3	-100	-100	150	.05
95	314	20	-1500	-40	-3000	-3	-100	-100	100	.22
95	314	20	-1500	-20	0	-3	-100	-100	100	.13
95	314	20	-900	-80	BELOW	-3	-100	-100	-100	.09
95	314	20	-900	0	3000	-3	-100	-100	-100	.09
95	314	20	-600	-80	BELOW	-3	-100	-100	100	.12
95	314	20	-600	-60	-6000	-3	-100	100	-100	.18
95	314	20	-300	-20	-3000	-3	100	100	-100	.33
95	314	20	-300	0	0	-3	100	-100	-100	.27
95	314	30	-900	-80	BELOW	-3	100	-100	-100	.07
95	314	30	-900	-40	-3000	-3	-100	-100	-100	.43
95	314	30	-600	-80	BELOW	-3	100	-100	-100	.24
95	314	30	-600	-60	-6000	-3	-100	100	-150	.02
95	314	30	-600	-60	-3000	-3	-100	-100	-150	1.32
95	314	30	-600	-60	-3000	-3	-100	100	-150	.26
95	314	30	-300	-20	-3000	-3	100	100	-100	.41
95	325	20	-900	-80	BELOW	-3	150	-100	100	.20
95	325	20	-900	-80	-6000	-3	-100	-100	-100	.41
95	325	20	-900	-20	-3000	-3	-100	-100	-100	.09
95	325	20	-600	0	-3000	-3	150	-100	-100	.13
95	325	20	-300	-20	-3000	-3	100	100	-100	.08
95	325	30	-900	-80	-6000	-3	-100	-100	-100	1.31
95	325	30	-900	-80	-6000	-3	100	-100	-100	.78
95	325	30	-600	-80	-6000	-3	-100	-100	-100	.29
95	325	30	-300	-20	-3000	-3	100	-100	-100	.14

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
95	325	30	-300	-20	-3000		-3	100	100	-100	.19
95	325	40	-600	-100	BELOW		-3	100	-100	-100	.09
100	314	20	-2100	-60	-6000		-3	-100	-100	150	.11
100	314	20	-1800	-60	-3000		-3	-100	100	-100	.19
100	314	20	-1500	-40	-3000		-3	-100	-100	100	.24
100	314	20	-1500	-40	0		-3	-100	-100	100	.18
100	314	20	-900	0	3000		-3	-100	-100	-100	.18
100	314	20	-600	0	-3000		-3	150	-100	-100	1.20
100	314	20	-600	0	0		-3	100	-100	-100	.42
100	314	30	-1200	-60	-3000		-3	-100	-100	-150	.09
100	314	30	-1200	-60	-3000		-3	-100	-100	-100	.10
100	314	30	-900	-80	BELOW		-3	100	-100	-100	.07
100	314	30	-900	-40	-3000		-3	-100	-100	-100	.95
100	314	30	-900	-40	-3000		-3	-100	-100	100	.28
100	314	30	-900	-40	0		-3	-100	-100	-100	.10
100	314	30	-600	-60	-3000		-3	-100	-100	-150	.30
100	314	30	-600	-60	-3000		-3	-100	-100	-100	.19
100	325	20	-600	-20	-3000		-3	100	-100	-100	.23
100	325	20	-600	0	-3000		-3	150	-100	-100	.13
100	325	30	-900	-80	-6000		-3	-100	-100	-100	.53
100	325	30	-900	-80	-6000		-3	100	-100	-100	.18
105	314	20	-1800	-60	-6000		-3	-100	-100	-100	.05
105	314	20	-1500	-40	0		-3	-100	-100	100	.09
105	314	20	-600	0	-3000		-3	100	-100	-100	.33
105	314	20	-600	0	0		-3	150	-100	-100	.73
105	314	30	-1200	-60	-6000		-3	100	-100	100	.21
105	314	30	-900	-40	0		-3	-100	-100	-100	.35
105	314	30	-600	-60	-3000		-3	-100	-100	-100	.13
105	325	20	-600	-20	-3000		-3	100	-100	-100	.30
110	314	30	-1200	-60	-6000		-3	100	-100	100	.05
110	314	30	-600	-20	-3000		-3	-100	-100	-100	.17
110	314	30	-600	-20	-3000		-3	-100	100	-100	.69
110	314	30	-600	-20	0		-3	-100	100	-150	.31
110	314	30	-300	-60	-6000		-3	100	-100	-100	.14
110	314	40	-300	-60	-6000		-3	100	-100	-100	.14
110	314	40	-300	-60	-6000		-3	150	-100	-100	.19
110	325	30	-600	-20	-3000		-3	100	-100	-100	.31
115	314	20	-600	-20	-3000		-3	-100	-100	-100	.69
115	314	20	-600	-20	-3000		-3	100	-100	-100	.83
115	314	30	-600	-20	-3000		-3	-100	-100	-100	.83
115	314	30	-600	-20	0		-3	-100	100	-150	.09
115	314	30	-600	[illegible]	0		-3	-100	100	-100	.60
120	314	20	-600	-20	0		-3	-100	100	-100	.17
120	314	30	-600	-20	-3000		-3	-100	-100	-100	.22
120	314	30	-600	-20	-3000		-3	-100	100	-100	.43
120	314	30	-600	-20	0		-3	-100	100	-100	.52
60	314	10	-900	-80	BELOW		-6				.09
75	314	10	-900	-80	BELOW		-3				.19
85	314	20	-900	-80	BELOW		-3				.19
90	314	30	-300	-40	-6000		3				.04
95	314	30	-300	-40	-6000		-3				.16
95	314	30	-300	-40	-6000		3				.06
100	314	30	-300	-60	-3000		-3				.05
100	314	30	-300	-40	-6000		-9				.03
100	314	30	-300	-40	-6000		-3				.33
100	314	30	-300	-40	-6000		3				.04
105	314	20	-1500	-40	-3000		-3				.09

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
105	314	30	-900	-60	-3000	-3				.26
105	314	30	-600	-80	-6000	-3				.16
105	314	30	-300	-80	-6000	3				.03
105	314	30	-300	-80	-6000	9				.02
105	314	3C	-300	-80	-3000	-3				.12
105	314	30	-300	-60	-3000	-3				.31
105	314	30	-300	-40	-6000	-6				.07
105	314	30	-300	-40	-6000	-3				.09
105	314	30	-300	-40	-6000	-3				.09
105	314	30	-300	-40	-3000	3				.04
105	314	30	-300	-40	0	-3				.13
110	314	30	-1500	-40	-3000	-3				.09
110	314	30	-900	-60	-3000	-3				.20
110	314	30	-600	-80	-6000	-3				.14
110	314	30	-600	-80	-6000	-3				.16
110	314	30	-300	-80	-6000	-3				.90
110	314	30	-300	-80	-6000	-3				.63
110	314	30	-300	-80	-6000	-3				.07
110	314	30	-300	-80	-6000	3				.03
110	314	30	-300	-80	-6000	9				.02
110	314	30	-300	-80	-3000	-3				.63
110	314	30	-300	-80	-3000	-3				1.09
110	314	30	-300	-80	-3000	-3				.34
110	314	30	-300	-60	-3000	-3				.69
110	314	30	-300	-60	-3000	-3				.19
110	314	30	-300	-60	-3000	-3				.26
110	314	30	-300	-40	-3000	-9				.03
110	314	30	-300	-40	-3000	-3				.31
110	314	30	-300	-40	-3000	3				.04
110	314	30	-300	-40	-3000	3				.06
110	314	30	-300	-40	0	-3				.13
110	314	30	-300	-20	0	-3				.79
110	314	30	-300	-20	0	-3				.50
115	314	20	-900	-80	-3000	-3				.14
115	314	20	-900	-80	-3000	3				.03
115	314	30	-900	-60	-3000	-3				.20
115	314	30	-600	-80	-6000	-3				.14
115	314	30	-600	-80	-6000	-3				.57
115	314	30	-300	-80	-6000	-6				.03
115	314	30	-300	-80	-6000	-6				.06
115	314	30	-300	-80	-6000	-3				.44
115	314	30	-300	-80	-6000	-3				.92
115	314	30	-300	-80	-6000	-3				.12
115	314	30	-300	-80	-3000	-3				.37
115	314	30	-300	-80	-3000	-3				1.05
115	314	30	-300	-60	-3000	-3				.09
115	314	30	-300	-40	-3000	-6				.07
115	314	30	-300	-40	-3000	-3				.08
115	314	30	-300	-40	0	-3				.40
115	314	30	-300	-20	0	-3				.48
115	314	40	-300	-80	-6000	-3				.47
115	314	40	-300	-80	-6000	-3				.32
120	314	20	-900	-80	-3000	-3				.10
120	314	30	-300	-80	-6000	-6				.03
120	314	30	-300	-80	-6000	-3				.34
120	314	30	-300	-80	-6000	-3				.06
120	314	30	-300	-80	-3000	-3				.33

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
120	314	30	-300	-40	-3000	-3				.08
120	314	30	-300	-20	0	-3				.50
120	314	40	-300	-80	-6000	-6				.05
120	314	40	-300	-80	-6000	-3				.40
125	314	30	-300	-80	-6000	-6				.03
125	314	40	-300	-80	-6000	-3				.18

STEADY STATE, DESCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.33
BLW	325	20	-300	20	-3000	-6	-100	-100	150	.01
40	314	10	-600	0	-3000	-3	100	-100	100	.22
40	314	10	-600	0	0	-3	100	-100	-100	.14
40	314	10	-600	20	0	-3	-100	-100	100	.15
40	314	10	-300	0	-3000	-6	-100	-100	150	.07
40	314	10	-300	0	-3000	-3	100	-100	100	.15
40	314	20	-300	-60	BELOW	-6	-100	-100	100	.12
40	314	20	-300	-60	BELOW	-3	-100	-100	100	.45
40	314	30	-300	-60	BELOW	-6	-100	-100	-100	.07
40	325	10	-1200	-80	-6000	-6	-100	-100	100	.05
40	325	10	-1200	-80	-6000	-3	-100	-100	100	.09
40	325	10	-600	0	-3000	-3	-100	-100	100	.24
40	325	10	-600	0	-3000	-3	100	-100	100	.53
40	325	10	-600	0	0	-6	-100	-100	150	.29
40	325	10	-600	0	0	-3	100	-100	150	.20
40	325	10	-600	20	0	-3	-100	-100	150	.24
40	325	10	-300	20	-3000	-3	100	-100	200	.46
40	325	20	-900	-40	0	-3	-100	100	-100	.22
40	325	20	-600	-80	BELOW	-3	-100	-100	-100	.57
40	325	20	-600	-60	-6000	-3	-100	-100	-100	.24
40	325	30	-900	-60	0	-3	-100	-100	-150	.18
40	325	30	-900	-40	0	-3	-100	-100	-100	.02
60	314	10	-600	0	-3000	-3	150	-100	-100	.17
60	314	10	-600	0	-3000	-3	150	-100	100	.10
60	314	10	-600	0	0	-3	-100	-100	-100	.13
60	314	10	-600	0	0	-3	100	-100	100	.20
60	314	10	-300	0	0	-3	-100	-100	100	.29
60	314	10	-300	20	0	-3	100	-100	-100	.36
60	314	20	-600	-20	-3000	-3	100	-100	-100	.29
60	314	20	-600	0	-3000	-3	-100	-100	-100	.32
60	314	20	-300	20	0	-3	100	-100	-100	.49
60	314	30	-300	-60	BELOW	-3	-100	-100	-100	.26
60	325	10	-600	0	-3000	-3	100	-100	-100	.41
60	325	10	-600	0	-3000	-3	100	-100	100	.19
60	325	10	-600	0	-3000	-3	100	-100	150	.17
60	325	10	-600	0	0	-3	100	-100	200	.05
60	325	10	-600	20	0	-3	-100	-100	150	.10
60	325	10	-300	20	-3000	-3	100	-100	200	.29
60	325	20	-1200	-80	-6000	-3	-100	-100	-100	.18
60	325	20	-900	-80	BELOW	-3	-100	-100	-100	.16
60	325	20	-900	-60	0	-3	-100	100	-100	.22
60	325	30	-600	-40	0	-3	-100	-100	-150	.06
70	314	10	-900	0	0	-3	-100	-100	150	.15
70	314	10	-600	20	0	-3	-100	-100	-100	.07

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	20	-600	0	-3000	-3	-100	-100	-100	.13
70	314	20	-600	0	-3000	-3	150	-100	-100	.08
70	314	20	-300	-20	-3000	-3	100	-100	-100	.24
70	314	20	-300	0	0	-3	100	-100	-100	.18
70	325	10	-1200	-60	BELOW	-3	-100	-100	100	.09
70	325	10	-900	-60	0	-3	-100	100	-100	.27
70	325	10	-600	0	-3000	-3	100	-100	-100	.19
70	325	10	-600	0	0	-3	100	-100	100	.30
70	325	10	-300	20	-3000	-3	100	-100	200	.15
70	325	10	-300	40	-3000	-3	100	-100	150	.18
70	325	20	-1200	-80	-6000	-6	-100	-100	-100	.04
70	325	20	-900	-80	BELOW	-3	-100	-100	100	.09
70	325	20	-600	-60	-6000	-3	-100	-100	-100	.22
70	325	20	-600	-40	0	-3	-100	-100	-150	.06
75	314	10	-900	0	0	-3	-100	-100	150	.20
75	314	10	-600	0	0	-3	-100	-100	-100	.23
75	314	10	-600	0	0	-3	100	-100	-100	.07
75	314	10	-600	20	0	-3	-100	-100	-100	.15
75	314	20	-600	0	-3000	-3	-100	-100	-100	.13
75	314	20	-600	0	-3000	-3	100	-100	-100	.20
75	314	20	-600	0	-3000	-3	150	-100	-100	.08
75	314	20	-300	-20	-3000	-3	100	-100	-100	.14
75	314	20	-300	0	-3000	-3	-100	-100	-100	.49
75	314	20	-300	0	-3000	-3	-100	-100	100	.12
75	314	20	-300	20	0	-3	-100	-100	-100	.30
75	325	10	-1200	-60	BELOW	-3	-100	-100	100	.09
75	325	10	-900	-60	-3000	-3	-100	-100	-100	.05
75	325	10	-900	-60	0	-3	-100	-100	-100	.27
75	325	10	-900	0	0	-3	-100	-100	-100	.25
75	325	10	-900	0	0	-3	-100	-100	150	.15
75	325	10	-600	0	-3000	-3	100	-100	-100	.19
75	325	10	-600	0	0	-3	100	-100	100	.34
75	325	10	-600	0	0	-3	100	-100	150	.10
75	325	10	-300	20	-3000	-3	100	-100	150	.06
75	325	20	-900	-80	-6000	-3	-100	-100	-100	.08
75	325	20	-600	-60	0	-3	-100	-100	-150	.18
75	325	30	-600	-60	0	-3	-100	100	-150	.18
80	314	10	-900	0	0	-3	-100	-100	150	.05
80	314	10	-600	0	0	-3	-100	-100	-100	.15
80	314	20	-600	-60	-6000	-3	-100	-100	-100	.22
80	314	20	-600	0	0	-3	-100	-100	-100	.36
80	314	20	-300	0	-3000	-3	-100	-100	-100	.10
80	314	20	-300	0	0	-3	100	-100	-100	.18
80	314	20	-300	20	0	-3	-100	-100	-100	.07
80	314	30	-300	-60	BELOW	-3	-100	100	-100	.24
80	325	10	-600	20	0	-3	100	-100	150	.21
80	325	20	-1200	-80	-6000	-6	-100	-100	-100	.04
80	325	20	-1200	-80	-3000	-3	-100	-100	-100	.63
80	325	20	-1200	-60	BELOW	-3	-100	-100	-100	.10
80	325	20	-900	-80	-6000	-3	-100	-100	-100	.08
80	325	20	-600	-60	0	-3	-100	-100	-150	.18
80	325	20	-600	0	0	-3	-100	-100	-100	.21
80	325	20	-600	0	0	-3	100	-100	-100	.05
80	325	30	-600	-80	-3000	-3	-100	-100	-100	.13
85	314	10	-900	0	0	-3	100	-100	100	.22
85	314	10	-600	0	0	-3	-100	-100	-100	.09

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
85	314	20	-600	-60	-6000	-3	-100	-100	-100	.22
85	314	20	-600	0	0	-3	-100	-100	-100	.41
85	314	20	-300	0	0	-3	100	-100	-100	.37
85	325	10	-600	20	0	-3	100	-100	150	.12
85	325	20	-1200	-80	-6000	-3	-100	-100	-100	.18
85	325	20	-600	-80	-3000	-3	-100	-100	-100	.45
85	325	20	-600	-60	0	-3	-100	-100	-100	.48
85	325	20	-600	-60	0	-3	-100	100	-100	.45
85	325	20	-600	0	0	-3	-100	-100	-100	.30
85	325	20	-600	0	0	-3	100	-100	-100	.30
85	325	20	-600	20	0	-3	100	-100	100	.91
85	325	30	-1200	-80	-6000	-3	-100	-100	-100	.04
85	325	30	-600	-80	-6000	-3	-100	-100	-100	.71
85	325	30	-600	-80	-6000	3	-100	-100	-100	.04
85	325	30	-600	-80	-3000	-3	-100	-100	-100	.09
85	325	30	-600	-80	-3000	3	-100	-100	-100	.05
90	314	20	-600	0	0	-3	-100	-100	-100	.17
90	314	30	-600	-80	-6000	-3	-100	-100	-100	.77
90	314	30	-600	-60	BELOW	-3	100	-100	-100	.47
90	325	20	-1200	-80	-6000	-3	-100	-100	-100	.75
90	325	20	-900	-80	-6000	-3	-100	-100	-100	.08
90	325	20	-900	20	-3000	-3	150	-100	100	.02
90	325	20	-600	0	0	-3	-100	-100	-100	.09
90	325	20	-600	0	0	-3	100	-100	-100	.30
90	325	30	-900	-80	-6000	-3	-100	-100	-100	1.83
90	325	30	-600	-80	-6000	-6	-100	-100	-100	.04
90	325	30	-600	-80	6000	-3	-100	-100	-100	1.49
90	325	30	-600	-80	-6000	3	-100	-100	-100	.04
90	325	30	-600	-80	-3000	-3	-100	-100	-100	.30
90	325	40	-600	-80	-6000	-3	-100	-100	-100	.13
95	314	30	-1200	-80	-6000	-3	-100	-100	-100	.43
95	314	30	-600	-80	-6000	-3	-100	-100	-100	2.10
95	314	30	-600	-80	-6000	-3	100	-100	-100	.26
95	314	30	-600	-60	-6000	-3	-100	-100	-100	.22
95	314	30	-600	-60	-6000	-3	100	-100	-100	1.68
95	314	30	-300	-40	-6000	-3	-100	-100	-100	.17
95	314	40	-1200	-80	-6000	-3	-100	-100	-100	.03
95	325	10	-900	40	0	-3	100	-100	150	.08
95	325	20	-900	20	-3000	-3	150	-100	100	.12
95	325	30	-900	-80	-6000	-3	-100	-100	-100	.54
95	325	30	-900	-80	-6000	-3	100	-100	-100	.09
95	325	30	-600	-80	-6000	-6	-100	-100	-100	.04
95	325	30	-600	-80	-6000	-3	-100	-100	-100	.49
95	325	40	-600	-100	BELOW	-3	100	-100	-100	.25
95	325	40	-600	-80	-6000	-3	-100	-100	-100	.57
95	325	40	-600	-80	-6000	-3	100	-100	-100	.23
100	314	30	-900	-80	-3000	-3	-100	-100	-100	.29
100	314	30	-900	-60	-6000	-3	-100	-100	-100	.31
100	314	30	-900	-60	-3000	-3	-100	-100	-100	1.60
100	314	30	-600	-80	BELOW	-3	100	-100	-100	.19
100	314	30	-600	-80	-6000	-3	-100	-100	-100	1.98
100	314	30	-600	-80	-6000	-3	100	-100	-100	1.27
100	314	30	-600	-60	BELOW	-3	100	-100	-100	.48
100	314	30	-600	-60	-6000	-3	-100	-100	-100	1.66
100	314	30	-600	-60	-6000	-3	100	-100	-100	.17
100	325	10	-900	40	-3000	-3	100	-100	150	.24

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
100	325	10	-900	40	0	-3	100	-100	150	.15
100	325	20	-900	40	-3000	-3	100	-100	100	.17
100	325	30	-900	-80	-6000	-3	-100	-100	-100	.08
105	314	30	-900	-60	-3000	-3	-100	-100	-100	.15
105	314	30	-600	-80	BELOW	-6	100	-100	-100	.03
105	314	30	-600	-60	-6000	-3	-100	-100	-100	.61
105	314	30	-600	-60	-6000	-3	100	-100	-100	1.74
105	314	40	-600	-60	-6000	-3	100	-100	-100	1.01
105	325	10	-900	40	0	-3	100	-100	200	.15
110	314	40	-600	-60	-6000	-3	100	-100	-100	1.04
90	314	10	-1800	-20	-3000	-3				.05
95	314	20	-1800	-20	-3000	-3				.07
95	314	20	-1800	-20	-3000	3				.04
100	314	10	-1800	-20	-3000	3				.04
100	314	20	-1800	-20	-3000	-3				.07
100	314	30	-600	-40	-6000	-3				.09
100	314	30	-600	-40	-3000	-3				.10
105	314	20	-1500	-60	-6000	-3				.08
105	314	30	-600	-40	-3000	-3				.47
105	325	10	-1800	-20	-3000	-3				.19
110	314	30	-600	-40	-3000	-3				.16
115	314	20	-1500	-60	-6000	-3				.08
115	314	30	-600	-40	-3000	-3				.29
120	314	20	-1500	-60	-6000	-3				.19
60		10	-900	0	-3000	-6	100	-100	150	.19
70		10	-900	0	-3000	-6	100	-100	150	.19
75		10	-900	0	-3000	-3	100	-100	150	.14
80		10	-900	0	-3000	-3	100	-100	150	.29
85		20	-300	0	0	-3	100	100	-100	.13
90		10	-900	0	-3000	-3	100	-100	100	.29
90		20	-600	20	-3000	-3	150	100	-100	.17
90		20	-600	20	0	-3	100	100	-100	.92
90		20	-600	20	0	-3	150	100	-100	.03
90		20	-300	0	0	-3	100	100	-100	.19
90		20	-300	0	0	-3	100	150	-100	.38
90		20	-300	0	0	-3	150	100	-100	.76
90		20	-300	20	0	-3	100	100	-100	.32
95		10	-600	20	-3000	-3	150	100	-100	.15
95		20	-600	20	-3000	-3	150	100	-100	.13
95		20	-600	20	0	-3	100	100	-100	.63
95		20	-600	20	0	-3	150	100	-100	1.28
95		20	-300	0	0	-3	100	100	-100	.49
95		20	-300	0	0	-3	100	150	-100	.10
95		20	-300	0	0	-3	150	150	-100	.03
100		20	-600	20	-3000	-3	150	100	-100	.28
100		20	-600	20	0	-3	100	100	-100	.19
100		20	-600	20	0	-3	150	100	-100	.26
100		20	-300	0	0	-3	100	150	-100	.38
105		20	-600	20	0	-3	100	100	-100	.12
105		20	-600	20	0	-3	100	150	-100	.20
105		20	-600	20	0	-3	150	150	-100	.26

TABLE LXXXIII - Continued

STEADY STATE, DESCENT, 9000 LB

\ '.	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	0	-3000	-3	150	-100	-100	.17
40	314	10	-600	0	-3000	-6	100	-100	100	.07
40	314	10	-600	0	-3000	-3	150	-100	100	.22
40	314	10	-300	0	-3000	-3	100	-100	100	.19
40	314	20	-900	-60	BELOW	-3	-100	-100	-100	.17
40	314	20	-300	0	-3000	-3	100	-100	-100	.12
40	314	20	-300	0	-3000	-3	100	-100	100	.10
40	314	20	-300	0	-3000	-3	150	-100	-100	.10
40	325	10	-900	0	-3000	-6	-100	-100	100	.09
40	325	10	-300	0	-3000	-3	-100	-100	-100	.05
40	325	10	-300	0	-3000	-3	-100	-100	100	.51
40	325	20	-600	-20	-3000	-3	-100	-100	-100	.35
40	325	20	-600	0	-3000	-3	100	-100	-100	.17
40	325	20	-300	0	-3000	-3	-100	-100	-100	.14
40	325	20	-300	0	-3000	-3	-100	-100	100	.41
60	314	10	-600	0	-3000	-6	100	-100	100	.10
60	314	10	-300	0	0	-3	150	-100	-100	.28
60	314	20	-900	-60	BELOW	-3	-100	-100	-100	.05
60	314	20	-600	-20	-3000	-3	100	-100	100	.29
60	314	20	-600	0	-3000	-3	150	-100	-100	.20
60	314	20	-600	0	-3000	-3	150	-100	100	.09
60	314	20	-300	0	-3000	-6	100	-100	-100	.10
60	314	20	900	0	-3000	-3	150	-100	-100	.05
60	325	10	-900	0	-3000	-3	-100	-100	100	.14
60	325	20	-600	-20	-3000	-3	100	-100	100	.08
60	325	20	-600	-20	-3000	-3	150	-100	-100	.30
70	314	10	-300	20	0	-3	150	-100	100	.05
70	314	20	-900	-60	BELOW	-3	100	-100	-100	.09
70	325	10	-900	0	-3000	-3	-100	-100	100	.17
70	325	20	-600	-20	-3000	-3	100	-100	-100	.08
75	314	20	-900	-60	BELOW	-3	100	-100	-100	.10
75	314	20	-600	0	-3000	-3	150	-100	-100	.37
75	314	20	-300	0	-3000	-3	150	-100	-100	.59
75	314	20	-300	20	0	-3	150	-100	-100	.05
75	325	10	-900	0	-3000	-3	-100	-100	-100	.19
75	325	10	-900	0	-3000	-3	-100	-100	100	.10
75	325	20	-600	-80	BELOW	-3	-100	-100	-100	.27
80	314	20	-900	-60	BELOW	-3	100	-100	-100	.06
80	314	20	-300	20	0	-3	100	100	-100	.24
80	314	20	-300	20	0	-3	150	-100	-100	.05
80	314	30	-300	-40	-6000	-3	150	-100	-100	.05
80	314	30	-300	0	-3000	-3	150	-100	-100	.24
80	325	30	-600	-80	BELOW	-3	-100	-100	-100	.27
80	325	30	-600	-80	BELOW	-3	100	-100	-100	.14
85	314	10	-900	-40	BELOW	-3	100	-100	100	.06
85	314	20	-300	0	-3000	-3	150	-100	-100	.70
85	314	30	-300	0	-3000	-3	150	-100	-100	.10
85	314	40	-300	-40	-6000	-3	200	-100	-100	.05
85	325	30	-600	-80	BELOW	-3	100	-100	-100	.09
90	314	20	-900	-40	BELOW	-3	100	-100	-100	.10
90	314	20	-900	-40	-6000	-3	100	-100	100	.05
90	314	20	-300	0	-3000	-3	150	-100	-100	.09
90	314	40	-300	-40	-6000	-3	150	-100	-100	.05
95	314	20	-900	-40	-6000	-3	100	-100	-100	.10

TABLE LXXXIII - Concluded

STEADY STATE, DESCENT, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
95	314	30	-600	-40	-6000	-3	100	-100	-100	.22
100	314	20	-1200	-20	-3000	-3	100	-100	-100	.12
100	314	20	-900	-40	-3000	-3	-100	-100	-100	.45
100	314	20	-900	-20	-3000	-3	-100	100	-100	.26
100	314	20	-600	-40	-6000	-3	100	-100	-100	.14
100	314	30	-1500	-40	-6000	-3	100	-100	-100	.03
100	314	30	-900	-40	-3000	-3	-100	-100	-100	.76
100	314	30	-300	-40	-6000	-3	100	-100	-100	.03
100	325	20	-900	-20	-3000	-3	-100	100	-100	.29
105	314	20	-1200	-20	-3000	-3	100	-100	-100	.41
105	314	20	-900	-40	-3000	-3	-100	-100	-100	.38
105	314	30	-900	-60	BELOW	-6	150	-100	-100	.09
105	314	30	-900	-40	-6000	-3	150	-100	-100	.05
110	314	20	-2100	-40	-6000	-3	100	-100	-100	.28
110	314	30	-1200	-60	BELOW	-3	-100	-100	-100	.12
110	314	30	-1200	-60	-6000	-3	-100	100	-100	.43
110	314	30	-1200	-20	-3000	-3	100	-100	-100	.22
110	314	30	-900	-40	-6000	-3	150	-100	-100	.39
115	314	20	-2100	-40	-6000	-3	100	-100	-100	.12
115	314	30	-1200	-60	-6000	-3	-100	-100	-100	.34
115	314	30	-1200	-60	-6000	-3	-100	100	-100	.21
115	314	30	-900	-60	BELOW	-6	200	-100	-100	.09
115	314	30	-900	-60	BELOW	-3	-100	-100	-100	.31
115	314	30	-900	-40	-6000	-3	100	-100	-100	.65
115	314	30	-900	-40	-6000	-3	150	-100	-100	.13
120	314	30	-900	-60	BELOW	-3	200	-100	-100	.07

STEADY STATE, AUTOROTATION, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	304	BLW	-2100	20	0	-3	-100	-100	300	.08
70	314	BLW	BELOW	-20	-3000	-3	100	-100	400	.05
75	304	BLW	-2100	20	0	-3	-100	-100	300	.23
75	314	BLW	BELOW	-20	0	-3	100	-100	400	.09
75	314	BLW	-2100	20	0	-3	-100	-100	300	.11
80	325	BLW	BELOW	0	0	-3	-100	-100	400	.02
80	325	BLW	BELOW	0	0	-3	100	-100	400	.09

TABLE LXXXIV. TIME FOR RIGHT SIDEWARD FLIGHT DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

RIGHTSIDE FLIGHT, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	304	30	-300	20	0	-3	-100	-100	-100	.08
BLW	314	30	-300	20	0	-3	-100	-100	-100	.41

RIGHTSIDE FLIGHT, HOVER, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	-3000	-3	-100	-100	-100	.48
BLW	314	30	-300	0	-3000	-3	100	-100	-100	.16

TABLE LXXXV. TIME FOR LONGITUDINAL REVERSAL DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

LONGITUDINAL REVERSAL, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	300	-20	-3000	-3	-100	-100	-100	.03
BLW	325	10	300	-20	-3000	-6	-100	-100	200	.02
BLW	325	20	300	-20	-3000	3	-100	-100	-100	.07
BLW	334	30	-300	-20	-6000	-3	-100	-100	-100	.24

LONGITUDINAL REVERSAL, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-600	-40	-6000	-3	-100	-100	-100	.09
BLW	314	30	-300	0	-3000	-6	-100	-100	-100	.02
BLW	314	30	-300	0	0	-3	-150	-100	-100	.12

LONGITUDINAL REVERSAL, ASCENT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	-3000	9	100	-100	-100	.08
BLW	314	40	-300	0	-3000	-3	150	-100	-100	.05

LONGITUDINAL REVERSAL, LEVEL FLIGHT, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	-60	-6000	-3	-100	-100	-100	.05
40	314	20	-300	-60	-6000	-3	-100	-100	-100	.05

LONGITUDINAL REVERSAL, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	.16
BLW	314	30	-300	-60	-6000	3	-100	-100	-100	.09
BLW	314	40	-300	-60	-6000	-6	-100	-100	-100	.11
40	314	10	-300	-80	-6000	-3	-100	-100	100	.09

TABLE LXXXVI. TIME FOR LATERAL REVERSAL DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

LATERAL REVERSAL, HOVER, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	325	20	-300	-20	0	-3	-100	-100	-100	.03
BLW	325	30	-300	-20	0	-3	-100	-100	-100	.09

LATERAL REVERSAL, HOVER, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	30	-300	0	-3000	-3	-100	-100	-100	.12

TABLE LXXXVI - Concluded

LATERAL REVERSAL, ASCENT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
80	325	30	1200	20	0	3	-100	-100	-100	.05

LATERAL REVERSAL, ASCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
60	325	30	300	-20	-3000	-3	100	-100	-100	.12

LATERAL REVERSAL, LEVEL FLIGHT, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
100	314	20	-600	0	-3000	-3	100	-100	-100	.07
105	314	20	-600	0	-3000	-3	100	-100	-100	.05

LATERAL REVERSAL, LEVEL FLIGHT, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
90	325	20	-600	20	0	-3	100	-100	-100	.07
90	325	20	-300	20	0	-3	-100	-100	-100	.19

LATERAL REVERSAL, DESCENT, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
70	314	20	-300	-20	-3000	-3	100	-100	-100	.08
70	314	20	-300	-20	-3000	-3	100	-100	100	.07
70	325	20	-300	-20	-3000	-3	100	-100	100	.07

TABLE LXXXVII. TIME FOR TRANSIENT DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

TRANSIENT, GRD CONDITION, 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-60	-6000	-3	-100	-100	-100	.15
BLW	BLW	BLW	-300	-20	-3000	-3	-100	-100	200	.31
BLW	BLW	10	-300	-60	-6000	-3	-100	-100	-100	.18
BLW	274	20	-300	0	-3000	-3	-100	-100	-100	.34
BLW	284	10	-300	-60	-6000	-3	-100	-100	-100	.08
BLW	284	10	-300	-20	-3000	-3	-100	-100	100	.11
BLW	294	10	-300	-60	-6000	-3	-100	-100	-100	.08
BLW	314	20	-300	-20	-3000	-3	-100	-100	-100	.11
BLW	325	30	-300	-20	-3000	-3	-100	-100	-100	.34

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-80	BELOW		-3	-100	-100	-100	.14
BLW	BLW	BLW	-300	-60	-6000		-3	-100	-100	-100	.58
BLW	BLW	BLW	-300	-40	-6000		-3	-100	-100	100	.08
BLW	BLW	BLW	-300	-40	-3000		-3	-100	-100	-100	.10
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	-100	.40
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	100	.57
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	150	.34
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	200	.09
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	-100	.72
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	100	.24
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	150	.53
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	200	.55
BLW	BLW	BLW	-300	0	-3000		3	-100	-100	-100	.15
BLW	BLW	BLW	-300	40	0		-3	-100	-100	-100	.25
BLW	BLW	BLW	-300	40	0		-3	-100	-100	100	.25
BLW	BLW	10	-300	-80	BELOW		-3	-100	-100	-100	.09
BLW	BLW	10	-300	-60	BELOW		-3	-100	-100	-100	.26
BLW	BLW	10	-300	-60	-6000		-6	-100	-100	100	.11
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	-100	.67
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	100	.06
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	150	.46
BLW	BLW	10	-300	-40	-6000		-3	-100	-100	150	.08
BLW	BLW	10	-300	-40	-3000		-3	-100	-100	-100	.22
BLW	BLW	10	-300	-40	-3000		-3	-100	-100	100	.10
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	-100	.05
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	100	.05
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	150	.25
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	200	.04
BLW	BLW	10	-300	-20	-3000		3	100	-100	150	.09
BLW	BLW	10	-300	0	-3000		-3	-100	-100	-100	.09
BLW	BLW	10	-300	0	-3000		-3	-100	-100	150	.06
BLW	BLW	20	-300	-40	-6000		-3	-100	-100	150	.12
BLW	BLW	20	-300	-20	-3000		-6	-100	-100	150	.02
BLW	BLW	20	-300	-20	-3000		-3	-100	-100	150	.05
BLW	BLW	20	-300	-20	-3000		3	-100	-100	-100	.05
BLW	BLW	20	-300	0	-3000		-3	-100	-100	150	.06
BLW	274	BLW	-300	-20	-6000		-3	-100	-100	150	.22
BLW	274	10	-300	-60	-6000		-3	-100	-100	-100	.11
BLW	274	10	-300	-60	-6000		-3	-100	-100	150	.21
BLW	274	10	-300	-40	-6000		-3	-100	-100	200	.19
BLW	274	10	-300	-40	-3000		-3	-100	-100	-100	.18
BLW	274	10	-300	-40	-3000		-3	-100	-100	100	.15
BLW	274	10	-300	-20	-3000		-3	-100	-100	-150	.05
BLW	274	10	-300	-20	-3000		-3	-100	-100	-100	.03
BLW	274	10	-300	-20	-3000		-3	-100	-100	200	.09
BLW	274	10	-300	-20	-3000		-3	-100	-100	250	.05
BLW	274	10	-300	-20	-3000		-3	100	-100	200	.09
BLW	274	10	-300	0	-3000		-3	-100	-100	100	.09
BLW	274	10	-300	0	-3000		-3	-100	-100	250	.06
BLW	274	20	-300	-80	BELOW		-3	-100	-100	-100	.13
BLW	274	20	-300	-40	BELOW		-3	-100	-100	-100	.19
BLW	274	20	-300	-40	-6000		-3	-100	-100	-100	.23
BLW	274	20	-300	-20	-3000		-6	-100	-100	150	.02
BLW	284	BLW	-300	0	-3000		-3	-100	-100	150	.08
BLW	284	10	-300	-60	BELOW		-3	-100	-100	-100	.11
BLW	284	10	-300	-60	-6000		-3	-100	-100	-100	.13

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	284	10	-300	-60	-6000		-3	-100	-100	100	.05
BLW	284	10	-300	-60	-6000		-3	-100	-100	150	.07
BLW	284	10	-300	-40	-3000		-3	-100	-100	100	.11
BLW	284	10	-300	-20	-6000		-3	-100	-100	200	.22
BLW	284	10	-300	-20	-3000		-3	-100	-100	-100	.03
BLW	284	10	-300	-20	-3000		-3	-100	-100	150	.06
BLW	284	10	-300	-20	-3000		-3	-100	-100	200	.05
BLW	284	10	-300	-20	-3000		-3	-100	-100	250	.04
BLW	284	10	-300	0	-3000		-3	-100	-100	-150	.07
BLW	284	10	-300	0	-3000		-3	-100	-100	100	.23
BLW	284	10	-300	0	-3000		-3	-100	-100	200	.05
BLW	284	10	-300	0	-3000		-3	-100	-100	250	.14
BLW	294	BLW	-300	0	-3000		-3	-100	-100	150	.05
BLW	294	10	-300	-80	BELOW		-3	-100	-100	-100	.09
BLW	294	10	-300	-60	-6000		-3	-100	-100	100	.66
BLW	294	10	-300	-40	-6000		-3	-100	-100	200	.19
BLW	294	10	-300	-40	-6000		-3	-100	-100	250	.04
BLW	294	10	-300	-40	-3000		-3	-100	-100	-100	.20
BLW	294	10	-300	-40	-3000		-3	-100	-100	100	.04
BLW	294	10	-300	-20	-3000		-3	-100	-100	100	.04
BLW	294	10	-300	-20	-3000		-3	-100	100	250	.03
BLW	294	10	-300	0	-3000		-3	-100	-100	100	.06
BLW	294	10	-300	0	-3000		-3	-100	-100	150	.07
BLW	294	10	-300	0	-3000		-3	-100	-100	250	.05
BLW	294	20	-300	-80	BELOW		-3	-100	-100	-100	.13
BLW	294	20	-300	-20	-3000		-3	-100	-100	200	.02
BLW	294	20	-300	-20	-3000		-3	-100	-100	250	.03
BLW	294	30	-300	20	0		-3	-150	-100	-100	.12
BLW	304	BLW	-300	0	-3000		-3	-100	-100	200	.08
BLW	304	10	-300	-80	BELOW		-3	-100	-100	100	.07
BLW	304	10	-300	-60	-6000		-3	-100	-100	100	.36
BLW	304	10	-300	-60	-6000		-3	-100	-100	200	.07
BLW	304	10	-300	-20	-6000		-3	-100	-100	250	.32
BLW	304	10	-300	-20	-3000		-3	-100	-100	100	.04
BLW	304	10	-300	-20	-3000		-3	-100	-100	250	.09
BLW	304	10	-300	-20	-3000		-3	-100	-100	300	.05
BLW	304	10	-300	-20	-3000		-3	-100	100	250	.03
BLW	304	10	-300	0	-3000		-3	-100	-100	-200	.07
BLW	304	10	-300	0	-3000		-3	-100	-100	150	.23
BLW	304	10	-300	0	-3000		-3	-100	-100	200	.08
BLW	304	10	-300	20	-3000		-3	-100	-100	200	.08
BLW	304	20	-300	-60	BELOW		-3	-100	-100	-100	.07
BLW	304	20	-300	-40	-3000		-3	-100	-100	-100	.13
BLW	304	20	-300	-20	-3000		-3	-100	-100	200	.02
BLW	304	20	-300	20	0		-3	-100	-100	100	.12
BLW	304	30	-300	0	-3000		-3	-100	-100	-100	.05
BLW	314	10	-300	-60	-6000		-3	-100	-100	100	.14
BLW	314	10	-300	-60	-6000		-3	-100	-100	150	.11
BLW	314	10	-300	-40	-6000		-3	-100	-100	250	.04
BLW	314	10	-300	-40	-3000		-3	-100	-100	100	.04
BLW	314	10	-300	-20	-6000		-3	-150	-100	250	.04
BLW	314	10	-300	-20	-3000		-3	-100	-100	100	.06
BLW	314	10	-300	-20	-3000		-3	-100	-100	250	.29
BLW	314	10	-300	-20	-3000		-3	-100	100	250	.02
BLW	314	10	-300	-20	-3000		-3	100	-100	250	.07
BLW	314	10	-300	0	-3000		-3	-100	-100	200	.08
BLW	314	10	-300	0	-3000		-3	-100	-100	250	.17
BLW	314	10	-300	0	-3000		-3	-100	-100	300	.06

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 7000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	10	600	0	-3000		-3	-100	-100	250	.03
BLW	314	20	-300	-60	BELOW		-3	-100	-100	-100	.15
BLW	314	20	-300	-60	BELOW		-3	-100	-100	150	.07
BLW	314	20	-300	-40	-3000		-3	-100	-100	-100	.13
BLW	314	20	-300	-40	-3000		-3	-100	-100	100	.15
BLW	314	20	-300	-20	0		-3	-100	-100	-100	.09
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.35
BLW	314	20	300	-60	-6000		-3	-100	-100	-100	.09
BLW	314	20	300	-60	-6000		-3	-100	-100	100	.07
BLW	314	30	-300	-80	-6000		-3	-100	-100	-100	.16
BLW	314	30	-300	-60	BELOW		-3	-100	-100	-100	.43
BLW	314	30	-300	-60	-3000		-3	-100	-100	-150	.14
BLW	314	30	-300	-40	-6000		-3	-100	-100	-100	.32
BLW	314	30	-300	-40	-3000		-3	-100	-100	-100	.09
BLW	314	30	-300	-20	-3000		-3	-100	-100	-100	.05
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	.10
BLW	314	30	-300	0	0		-3	-100	-100	-100	.12
BLW	314	30	300	-60	-6000		-3	-100	-100	-100	.11
BLW	314	30	300	-60	-6000		3	-100	-100	-100	.05
BLW	314	30	600	0	-3000		3	-100	-100	-100	.07
BLW	325	BLW	-300	0	-3000		-3	-100	-100	200	.12
BLW	325	10	-300	-80	BELOW		-3	-100	-100	100	.07
BLW	325	10	-300	-40	-6000		-3	-100	-100	250	.05
BLW	325	10	-300	-40	-6000		-3	-100	-100	300	.19
BLW	325	10	-300	-20	-6000		-3	-150	-100	250	.10
BLW	325	10	-300	-20	-6000		-3	-150	-100	300	.04
BLW	325	10	-300	-20	0		-3	-100	-100	100	.24
BLW	325	10	-300	-20	0		-3	-100	-100	200	.16
BLW	325	10	-300	0	-3000		-3	-100	-100	200	.08
BLW	325	10	-300	0	0		-3	-100	-100	100	.16
BLW	325	10	-300	20	-3000		-3	-100	-100	250	.08
BLW	325	20	-300	-80	BELOW		-3	-100	-100	-100	.16
BLW	325	20	-300	-40	-3000		-3	-100	-100	100	.12
BLW	325	20	-300	-40	-3000		-3	-100	-100	150	.15
BLW	325	20	-300	-20	-3000		-3	-100	-100	100	.09
BLW	325	20	-300	-20	0		-3	-100	-100	-100	.17
BLW	325	20	-300	0	-3000		-3	-100	-100	100	.12
BLW	325	20	-300	0	0		-6	-100	-100	-100	.05
BLW	325	20	300	20	-3000		-3	-100	-100	-100	.14
BLW	325	30	-300	-60	BELOW		-3	-100	-100	-100	.08
BLW	325	30	-300	-60	-3000		-3	-100	-100	-100	.38
BLW	325	30	-300	-40	BELOW		-3	-100	-100	100	.19
BLW	325	30	-300	-40	-6000		-3	-100	-100	-100	.12
BLW	325	30	-300	-20	-6000		-3	-100	-100	-100	.03
BLW	325	30	-300	-20	-3000		-3	-100	-100	-100	.07
BLW	334	10	-300	-40	-6000		-3	-100	-100	250	.09
BLW	334	10	-300	-20	-3000		-3	-100	-100	300	.14
BLW	334	30	-300	-20	-6000		3	-100	-100	-100	.05
BLW	334	30	-300	-20	-3000		-3	-100	-100	-100	.09
BLW	BLW	10	-300	-100	BELOW		-3				.17
BLW	274	10	-300	-100	BELOW		-3				.04
BLW	284	10	-300	-100	BELOW		-3				.04
BLW	294	10	-300	-100	BELOW		-3				.09
BLW	304	10	-300	-100	BELOW		-3				.03
BLW	314	10	-300	-100	BELOW		-3				.03

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-60	-6000		-3	-100	-100	-100	.19
BLW	BLW	BLW	-300	0	-3000		-6	-100	-100	250	.03
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	100	.17
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	150	.57
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	200	.38
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	250	.33
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	250	.04
BLW	BLW	BLW	-300	0	0		-3	-100	-100	150	.14
BLW	BLW	BLW	-300	0	0		-3	-100	-100	200	.31
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	-100	.37
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	100	.25
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	150	.58
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	200	.21
BLW	BLW	BLW	-300	20	-3000		-3	100	-100	150	.12
BLW	BLW	BLW	-300	20	-3000		-3	100	-100	200	.06
BLW	BLW	BLW	-300	20	0		-3	-100	-100	-100	.25
BLW	BLW	BLW	-300	20	0		-3	-100	-100	100	.22
BLW	BLW	BLW	-300	20	0		-3	-100	-100	150	.66
BLW	BLW	BLW	-300	20	0		-3	-100	-100	200	.74
BLW	BLW	BLW	-300	40	-3000		-3	-100	-100	150	.26
BLW	BLW	10	-300	-80	BELOW		-3	-100	-100	-100	.21
BLW	BLW	10	-300	-60	BELOW		-3	-100	-100	-100	.11
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	-100	.40
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	100	.09
BLW	BLW	10	-300	-40	BELOW		-3	-100	-100	-100	.12
BLW	BLW	10	-300	-40	-6000		-3	-100	-100	100	.52
BLW	BLW	10	-300	-40	-6000		-3	-100	-100	150	.09
BLW	BLW	10	-300	-20	-6000		-3	-100	-100	-100	.19
BLW	BLW	10	-300	-20	-6000		-3	-100	-100	100	.10
BLW	BLW	10	-300	0	-3000		-3	-100	-100	100	.21
BLW	BLW	10	-300	0	-3000		-3	-100	-100	150	.16
BLW	BLW	10	-300	0	-3000		-3	-100	-100	200	.16
BLW	BLW	10	-300	0	-3000		-3	-100	-100	250	1.03
BLW	BLW	10	-300	0	0		-3	-100	-100	150	.08
BLW	BLW	10	-300	20	-3000		-3	-100	-100	200	.07
BLW	BLW	10	-300	20	0		-3	-100	-100	150	.06
BLW	BLW	10	300	-60	-6000		-3	-100	-100	-100	.14
BLW	BLW	10	300	-60	-6000		-3	-100	-100	100	.14
BLW	BLW	20	-300	-20	-6000		-3	-100	-100	-100	.05
BLW	274	BLW	-300	20	0		-3	-100	-100	250	.04
BLW	274	10	-300	-60	BELOW		-3	-100	-100	-100	.11
BLW	274	10	-300	-60	-6000		-3	-100	-100	100	.10
BLW	274	10	-300	-40	BELOW		-3	-100	-100	100	.14
BLW	274	10	-300	0	-3000		-6	-100	-100	250	.03
BLW	274	10	-300	0	-3000		3	-100	-100	200	.03
BLW	274	10	-300	0	0		-3	-100	-100	200	.07
BLW	274	10	-300	20	-3000		-3	-100	-100	200	.07
BLW	274	10	-300	20	0		-3	-100	-100	200	.06
BLW	274	10	-300	20	0		-3	100	-100	200	.07
BLW	274	20	-300	-60	-6000		-3	-100	-100	-100	.28
BLW	284	BLW	-300	0	0		-3	-100	-100	250	.14
BLW	284	BLW	-300	20	0		-3	-100	-100	200	.09
BLW	284	BLW	-300	20	0		-3	-100	-100	250	.20
BLW	284	10	-300	-80	BELOW		-3	-100	-100	100	.07
BLW	284	10	-300	-20	-6000		-3	-100	-100	100	.05
BLW	284	10	-300	0	-3000		-3	-100	-100	300	.28
BLW	284	10	-300	0	-3000		3	-100	-100	250	.12

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	314	20	-300	20	0		-6	-100	-100	-100	.07
BLW	314	20	-300	20	0		-3	-100	-100	-100	.29
BLW	314	20	-300	20	0		-3	-100	-100	100	.10
BLW	314	20	300	0	-3000		-3	-100	-100	-100	.07
BLW	314	30	-300	-60	-6000		-3	-100	-100	-100	.35
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000		-3	100	-100	-100	.10
BLW	314	30	-300	0	-3000		3	-100	-100	-100	.07
BLW	314	30	300	-60	-6000		-3	-150	-100	-100	.12
BLW	314	30	300	-40	-6000		-3	-100	-100	-100	.14
BLW	325	10	-300	-60	-6000		-3	-100	-100	150	.17
BLW	325	10	-300	0	-3000		-3	-100	-100	300	.16
BLW	325	10	-300	20	-3000		-3	-100	-100	250	.21
BLW	325	10	-300	20	0		-3	-100	-100	100	.10
BLW	325	10	-300	20	0		-3	-100	-100	250	.09
BLW	325	10	-300	40	-3000		-3	-100	-100	250	.26
BLW	325	10	300	0	-3000		-3	-100	-100	300	.05
BLW	325	20	-300	-80	BELOW		-3	-100	-100	100	.07
BLW	325	20	-300	0	-3000		-3	-100	-100	100	.10
BLW	325	20	300	0	-3000		-3	-100	-100	-100	.12
BLW	325	20	600	0	-3000		3	-100	-100	-100	.09
BLW	325	30	-300	20	0		-3	-150	-100	-100	.11
BLW	BLW	10	-300	-40	-6000		-3				.04
BLW	BLW	10	-300	-40	-6000		-3				.22
BLW	BLW	10	-300	-40	-6000		-3				.04
BLW	BLW	20	-300	-60	-6000		-3				.05
BLW	274	20	-300	-60	-6000		-3				.05
BLW	284	10	-300	-60	-6000		3				.09
BLW	284	20	-300	-40	-6000		-3				.10
BLW	294	10	-300	-40	-6000		-3				.09
BLW	304	10	-300	-40	-6000		-3				.06
BLW	314	10	-300	-40	-6000		-3				.06
BLW		BLW	-300	0	-3000		-3	-100	-100	-100	.53
BLW		BLW	-300	20	-3000		-3	-100	-100	-100	.10
BLW		10	-300	0	-3000		-3	-100	-100	-100	.42
BLW		10	-300	0	-3000		-3	-100	-100	-100	.04
BLW		BLW	-300	0	-3000		-3	-100	-100	-100	.05
BLW		10	-300	0	-3000		-3	-100	-100	-100	.14
BLW		BLW	-300	0	-3000		-3	-100	-100	-100	.10
BLW		BLW	-300	0	-3000		-3	-100	-100	100	.15
BLW		10	-300	0	-3000		-3	-100	-100	100	.30
BLW		BLW	-300	0	-3000		-3	-100	-100	100	.04
BLW		10	-300	0	-3000		-3	-100	-100	150	.16
BLW		BLW	-300	0	-3000		-3	-100	-100	150	.10
BLW		10	-300	0	-3000		-3	-100	-100	100	.14
BLW		10	-300	0	-3000		-3	-100	-100	150	.04
BLW		20	-300	0	-3000		-3	-100	-100	-100	.10
BLW		30	-300	0	-3000		-3	-100	-100	-100	.14

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	284	10	-300	0	0	-3	-100	-100	250	.10
BLW	284	10	-300	20	-3000	-3	100	-100	200	.06
BLW	284	10	-300	20	0	-3	-100	-100	200	.22
BLW	284	10	-300	20	0	-3	-100	-100	250	.20
BLW	284	10	300	-60	-6000	-3	-100	-100	100	.08
BLW	294	BLW	-300	0	-3000	-12	-100	-100	300	.03
BLW	294	BLW	-300	0	-3000	-3	-100	-100	300	.19
BLW	294	BLW	-300	20	-3000	-3	100	-100	250	.03
BLW	294	BLW	-300	20	0	-3	-100	-100	250	.41
BLW	294	BLW	-300	20	0	-3	-100	-100	300	.10
BLW	294	10	-300	-60	BELOW	-3	-100	-100	100	.04
BLW	294	10	-300	-60	-6000	-3	-100	-100	100	.17
BLW	294	10	-300	0	-3000	-3	-100	-100	250	.43
BLW	294	10	-300	0	-3000	-3	-100	-100	300	.13
BLW	294	10	-300	0	0	-3	-100	-100	250	.10
BLW	294	10	-300	20	-3000	-3	-100	-100	250	.06
BLW	294	10	-300	20	0	-3	-100	-100	250	.18
BLW	294	10	-300	20	0	-3	-100	-100	300	.06
BLW	304	10	-300	-60	-6000	-3	-100	-100	-100	.05
BLW	304	10	-300	-60	-6000	-3	-100	-100	150	.09
BLW	304	10	-300	0	-3000	-3	-100	-100	250	.17
BLW	304	10	-300	0	-3000	-3	-100	-100	300	.40
BLW	304	10	-300	0	-3000	-3	-100	-100	350	.06
BLW	304	10	-300	0	0	-3	-100	-100	250	.14
BLW	304	10	-300	0	0	-3	-100	-100	300	.07
BLW	304	10	-300	20	-3000	-3	-100	-100	250	.06
BLW	304	10	-300	20	-3000	-3	100	-100	250	.05
BLW	304	10	-300	20	0	-3	-100	-100	200	.10
BLW	304	10	-300	20	0	-3	-100	-100	250	.05
BLW	304	10	-300	20	0	-3	-100	-100	300	.21
BLW	304	10	-300	20	0	3	-100	-100	250	.04
BLW	304	20	-300	-60	-6000	-3	-100	-100	-100	.05
BLW	304	20	-300	-20	-6000	-3	-100	-100	150	.16
BLW	304	30	-300	-20	-6000	-3	-100	-100	100	.03
BLW	314	10	-300	-60	-6000	-3	-100	-100	-100	.05
BLW	314	10	-300	-60	-6000	-3	-100	-100	150	.17
BLW	314	10	-300	-40	-6000	-3	-100	-100	200	.09
BLW	314	10	-300	0	-3000	-3	-100	-100	-100	.16
BLW	314	10	-300	0	-3000	-3	-100	-100	300	.16
BLW	314	10	-300	0	-3000	-3	-100	-100	350	.18
BLW	314	10	-300	0	0	-3	-100	-100	300	.07
BLW	314	10	-300	20	-3000	-3	-100	-100	250	.07
BLW	314	10	-300	20	-3000	-3	100	-100	300	.05
BLW	314	10	-300	20	0	-3	-100	-100	250	.10
BLW	314	10	-300	20	0	3	-100	-100	300	.04
BLW	314	10	300	-60	-6000	-3	-100	-100	150	.08
BLW	314	10	300	0	-3000	-3	-100	-100	200	.07
BLW	314	20	-300	-60	BELOW	-3	-100	-100	100	.04
BLW	314	20	-300	-60	-6000	-3	-100	-100	100	.09
BLW	314	20	-300	-60	-6000	-3	-100	-100	150	.10
BLW	314	20	-300	-20	-6000	-3	-100	-100	-100	.16
BLW	314	20	-300	-20	-6000	-3	-100	-100	150	.05
BLW	314	20	-300	0	-3000	-3	-100	-100	-100	.19
BLW	314	20	-300	0	-3000	-3	-100	-100	150	.17

TABLE LXXXVII - Continued

TRANSIENT, GRD CONDITION, 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	BLW	BLW	-300	-100	BELOW		-3	-100	-100	-100	.07
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	150	.28
BLW	BLW	BLW	-300	-20	-3000		-3	-100	-100	200	.04
BLW	BLW	BLW	-300	0	-3000		-6	-100	-100	150	.07
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	100	.22
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	150	.35
BLW	BLW	BLW	-300	0	-3000		-3	-100	-100	200	.27
BLW	BLW	BLW	-300	0	-3000		3	-100	-100	150	.09
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	150	.36
BLW	BLW	BLW	-300	20	-3000		-3	-100	-100	200	.07
BLW	BLW	BLW	-300	20	0		-3	-100	-100	150	.30
BLW	BLW	BLW	-300	20	0		-3	-100	-100	200	.33
BLW	BLW	10	-300	-100	BELOW		-3	-100	-100	-100	.27
BLW	BLW	10	-300	-60	BELOW		-3	-100	-100	100	.06
BLW	BLW	10	-300	-60	BELOW		-3	-100	-100	150	.12
BLW	BLW	10	-300	-60	BELOW		-3	100	-100	100	.10
BLW	BLW	10	-300	-60	BELOW		-3	100	-100	150	.17
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	-100	.12
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	100	.40
BLW	BLW	10	-300	-60	-6000		-3	-100	-100	200	.05
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	200	.08
BLW	BLW	10	-300	-20	-3000		-3	-100	-100	250	.04
BLW	BLW	10	-300	0	-3000		-3	-100	-100	150	.05
BLW	BLW	10	-300	0	-3000		-3	-100	-100	200	.14
BLW	BLW	10	-300	20	-3000		-3	-100	-100	200	.15
BLW	BLW	10	-300	20	0		-3	-100	-100	200	.06
BLW	BLW	20	-300	-60	BELOW		-3	-100	-100	150	.06
BLW	BLW	20	-300	-60	BELOW		-3	100	-100	150	.03
BLW	274	BLW	-300	0	-3000		-3	-100	-100	250	.04
BLW	274	10	-300	-60	BELOW		-3	100	-100	200	.04
BLW	274	10	-300	-20	-3000		-3	-100	-100	250	.17
BLW	274	10	-300	20	-3000		-3	-100	-100	200	.03
BLW	274	20	-300	-60	BELOW		-3	100	-100	200	.03
BLW	284	BLW	-300	0	-3000		-3	-100	-100	250	.12
BLW	284	10	-300	-60	BELOW		-3	-100	-100	200	.04
BLW	284	10	-300	-60	-6000		-3	100	-100	200	.17
BLW	284	10	-300	-20	-3000		-3	-100	-100	250	.07
BLW	284	10	-300	-20	-3000		-3	-100	-100	300	.16
BLW	284	10	-300	0	-3000		-3	-100	-100	200	.05
BLW	284	10	-300	0	-3000		-3	-100	-100	250	.22
BLW	284	10	-300	20	-3000		-3	-100	-100	250	.42
BLW	284	10	-300	20	0		-3	-100	-100	250	.22
BLW	284	10	300	-60	-6000		-3	-100	-100	150	.08
BLW	294	BLW	-300	0	-3000		-3	-100	-100	300	.07
BLW	294	BLW	-300	20	0		-3	-100	-100	300	.24
BLW	294	10	-300	-100	BELOW		-3	-100	-100	100	.06
BLW	294	10	-300	-100	BELOW		-3	100	-100	100	.20
BLW	294	10	-300	-60	BELOW		-3	100	-100	200	.07
BLW	294	10	-300	-60	BELOW		-3	100	-100	250	.07
BLW	294	10	-300	-60	-6000		-3	-100	-100	200	.05
BLW	294	10	-300	-20	-3000		-3	-100	-100	250	.06
BLW	294	10	-300	0	-3000		-3	-100	-100	250	.16
BLW	294	10	-300	20	-3000		-3	-100	-100	250	.14
BLW	294	10	-300	20	-3000		-3	-100	-100	300	.11
BLW	294	10	-300	20	0		-3	-100	-100	250	.06

TABLE LXXXVII - Concluded

TRANSIENT, GRD CONDITION, 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
BLW	294	20	-300	-60	BELOW		-3	100	-100	200	.10
BLW	294	30	-300	-60	BELOW		-3	100	-100	250	.14
BLW	304	10	-300	-60	BELOW		-3	100	-100	250	.14
BLW	304	10	-300	-60	-6000		-3	-100	-100	200	.05
BLW	304	10	-300	-20	-3000		-3	-100	-100	300	.15
BLW	304	10	-300	0	-3000		-3	-100	-100	250	.29
BLW	304	10	-300	20	-3000		-3	-100	-100	250	.08
BLW	304	10	-300	20	-3000		-3	-100	-100	300	.11
BLW	304	10	-300	20	0		-3	-100	-100	250	.14
BLW	304	10	-300	20	0		-3	-100	-100	300	.15
BLW	304	10	300	-60	-6000		-3	-100	-100	150	.08
BLW	304	20	-300	-60	BELOW		-3	-100	-100	200	.08
BLW	314	10	-300	-100	BELOW		-3	100	-100	100	.06
BLW	314	10	-300	-60	BELOW		-3	100	-100	250	.04
BLW	314	10	-300	-20	-3000		-3	-100	-100	300	.12
BLW	314	10	-300	0	-3000		-3	-100	-100	200	.06
BLW	314	10	-300	0	-3000		-3	-100	-100	250	.06
BLW	314	10	-300	0	-3000		-3	-100	-100	300	.09
BLW	314	10	-300	20	-3000		-3	-100	-100	300	.10
BLW	314	10	-300	20	0		-3	-100	-100	300	.15
BLW	314	20	-300	-60	BELOW		-3	-100	-100	150	.05
BLW	314	20	-300	-60	BELOW		-3	-100	-100	250	.08
BLW	314	20	-300	-60	BELOW		-3	100	-100	250	.22
BLW	314	20	-300	0	-3000		-3	-100	-100	-100	.07
BLW	314	20	-300	20	-3000		-3	-100	-100	100	.09
BLW	314	20	-300	20	0		-3	-100	-100	-100	.05
BLW	314	20	300	0	-3000		-3	-100	-100	-100	.08
BLW	314	30	-300	0	-3000		-3	-100	-100	-100	.09
BLW	314	30	-300	20	-3000		-3	-100	-100	-100	.10
BLW	314	30	-300	20	0		-3	-100	-100	-100	.07
BLW	314	40	-300	-60	BELOW		-3	-100	-100	-100	.09
BLW	325	10	-300	-100	BELOW		-3	100	-100	150	.11
BLW	325	10	-300	-60	-6000		-3	-100	-100	250	.16
BLW	325	10	-300	0	-3000		-3	-100	-100	300	.07
BLW	325	10	300	0	-3000		-3	-100	-100	200	.07
BLW	325	20	-300	-60	BELOW		-3	-100	-100	250	.19
BLW	325	20	-300	-60	-6000		-3	100	-100	250	.03
BLW	325	20	300	-80	BELOW		-3	-100	-100	-100	.18

TRANSIENT, TRANSITION, 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	TIME
60	314	BLW	-1200	20	0		-3	-100	-100	250	.08
60	325	10	-1200	20	0		-3	-100	-100	200	.12
70	304	BLW	-1200	20	0		-3	-100	-100	300	.08
70	314	BLW	-1800	-20	-3000		-3	-100	-100	200	.09
70	314	BLW	-1800	-20	-3000		-3	100	-100	250	.09
70	314	BLW	-1800	-20	-3000		3	-100	-100	400	.03
70	314	20	-1800	-20	-3000		3	100	-100	100	.03
75	314	30	BELOW	0	0		-3	-100	-100	-100	.14
80	314	10	-600	20	0		-3	-100	-100	200	.23
80	325	BLW	BELOW	0	0		-3	-100	-100	400	.07
85	325	20	-600	20	0		-3	-100	-100	100	.23

TABLE LXXXVIII. OCCURRENCES FOR MISSION SEGMENT VARIATION DISTRIBUTED IN RANGES OF TEN PARAMETERS BY MISSION SEGMENT AND GROSS WEIGHT

MISSION SEGMENT VARIATION, ASCENT 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
90	314	30	-300	-20	-3000	-3	100	-100	-100	1
110	314	30	-300	-20	-3000	-3	-100	-100	-100	1
110	325	30	-300	-20	-3000	-3	100	-100	-100	1

MISSION SEGMENT VARIATION, ASCENT 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
BLW	314	30	-300	-60	-6000	-3	-100	-100	-100	1
BLW	325	30	-300	20	-3000	-3	-100	-100	-100	1
60	314	30	-300	-60	-6000	-3	-100	-100	-100	1
75	325	20	-300	-20	-3000	-3	-100	100	-100	1
80	325	30	-300	0	-3000	-3	-100	100	-100	1
85	325	20	-300	-20	-3000	-3	100	100	-100	1
85	325	30	-300	-20	0	-3	-100	100	-100	1
90	314	30	-300	-40	-3000	-3	-100	100	-100	1
90	325	40	-300	-80	BELOW	-3	100	-100	-100	1
95	314	40	-300	-40	-3000	-3	-100	-100	-100	1
95	325	30	-300	-20	0	-3	-100	-100	-100	1
100	314	30	-300	-40	-3000	-3				1
100	314	40	-300	-80	-3000	-3				1
100	314	40	-300	-60	-6000	-3				1
100	314	40	-300	-40	-3000	-3				1
105	314	30	-300	-60	-6000	-3				1
110	314	30	-300	-80	-3000	-3				1

MISSION SEGMENT VARIATION, ASCENT 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
60	314	30	-300	-60	-6000	-3	-100	-100	-100	1
90	314	30	-300	-40	-6000	-3	150	-100	-100	1
100	314	30	-300	-40	-3000	-3	-100	100	-100	1
105	314	40	-300	-60	BELOW	-3	-100	100	-100	1
105	314	40	-300	-40	-6000	-3	150	-100	-100	2

MISSION SEGMENT VARIATION, ASCENT 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
70	314	20	-300	20	0	-3	100	-100	-100	1
75	325	30	-300	-80	BELOW	-3	-100	-100	-100	1
80	314	30	-300	-40	-6000	-3	-100	-100	-100	1
80	325	30	-300	-80	-6000	-3	-100	-100	-100	1
85	314	20	-300	0	0	-3	100	-100	-100	1
90	325	20	-300	20	0	-3	100	-100	-100	1
90	325	30	-300	-80	-6000	-3	-100	-100	-100	1
90	325	40	-300	-80	BELOW	-3	100	-100	-100	1
90	325	40	-300	-80	-6000	-3	-100	-100	-100	1
90	325	40	-300	-80	-6000	-3	100	-100	-100	1
90	314	30	-300	-60	-6000	-3				1
85		30	-300	20	0	-3	100	100	-100	1
90		30	-300	20	0	-3	100	150	-150	1
95		30	-300	20	0	-3	100	100	-150	1

TABLE LXXXVIII - Continued

MISSION SEGMENT VARIATION, LEVEL FLIGHT 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	OCCUR
80	314	20	-300	-20	-3000		-3	-200	-100	-100	1
85	325	20	-300	-20	-3000		-3	-250	-100	-100	1
95	314	30	-300	-20	0		-3	-100	-100	-100	1
95	325	30	-300	-20	-3000		-3	-100	-100	-100	1
95	334	30	-300	-20	-6000		-3	100	-100	-100	1

MISSION SEGMENT VARIATION, LEVEL FLIGHT 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	OCCUR
40	314	20	-300	-60	-6000		-3	-100	-100	-100	2
40	314	20	-300	0	3000		-3	-100	-100	-100	1
60	314	30	-300	0	3000		-3	-100	-100	-100	1
80	314	20	-300	0	0		-3	-100	100	-100	1
80	325	20	-300	-20	-3000		-3	-100	100	-100	1
85	314	30	-300	-40	-3000		-3	-100	-100	-100	2
85	314	30	-300	-40	-3000		-3	-100	100	-100	1
85	325	20	-300	-20	-3000		-3	-100	100	-100	1
85	325	20	-300	20	0		-3	150	-100	100	1
85	325	30	-300	-20	-3000		-3	-100	-100	-100	1
85	325	40	-300	-20	-3000		-3	100	-100	-150	1
90	314	20	-300	-20	-3000		-3	100	100	-100	1
90	325	30	-300	-80	-6000		-3	-100	-100	-100	1
90	325	30	-300	-20	-3000		-3	-100	-100	-100	2
90	325	40	-300	-80	BELOW		-3	100	-100	-100	1
95	314	30	-300	-60	-3000		-3	-100	-100	-200	1
95	314	30	-300	0	-3000		-3	100	-100	-100	1
95	314	30	-300	0	3000		-3	-100	-100	-100	1
95	314	40	-300	-60	-6000		-3	-100	-100	-100	1
95	314	40	-300	-40	-3000		-3	-100	-100	-100	1
95	325	40	-300	-100	BELOW		-3	100	-100	-100	1
100	314	30	-300	-60	-3000		-3	-100	100	-100	1
100	314	30	-300	0	-3000		-3	100	-100	-100	1
100	314	40	-300	-80	BELOW		-3	100	-100	-100	1
100	325	30	-300	-20	0		-3	-100	100	-100	1
105	314	40	-300	-60	-6000		-3	100	-100	-100	2
105	314	40	-300	-40	-3000		-3	100	-100	-100	1
105	325	30	-300	-20	-3000		-3	100	100	-100	1
90	314	30	-300	-40	-6000		-3				1
95	314	30	-300	-40	-3000		-3				1
105	314	30	-300	-60	-6000		-3				1
105	314	30	-300	-80	-3000		-3				1
105	314	30	-300	-80	-3000		-3				1
110	314	30	-300	-80	-6000		-3				1
110	314	30	-300	-40	0		-3				1
115	314	30	-300	-60	-6000		-3				1

TABLE LXXXVIII - Continued

MISSION SEGMENT VARIATION, LEVEL FLIGHT 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	OCCUR
60	325	20	-300	0	0		-3	-100	100	-100	1
60	325	20	-300	20	0		-3	100	-100	-100	1
70	314	20	-300	0	0		-3	100	-100	-100	1
75	314	20	-300	0	0		-3	-100	-100	-100	1
80	314	20	-300	20	0		-3	-100	-100	-100	1
80	314	20	-300	20	0		-3	100	-100	-100	1
80	314	30	-300	0	-3000		-3	150	-100	-100	1
80	314	40	-300	-60	-3000		-3	-100	100	-100	1
80	325	20	-300	0	0		-3	100	-100	-100	1
80	325	20	-300	40	0		-3	-100	-100	-100	1
80	325	30	-300	-80	-6000		-3	-100	-100	-100	1
85	325	30	-300	-80	-6000		-3	-100	-100	-100	1
85	325	40	-300	-80	-3000		-3	-100	-100	-150	2
90	314	30	-300	-80	-6000		-3	-100	-100	-100	1
90	314	30	-300	-60	-6000		-3	-100	-100	-100	1
90	314	40	-300	-80	-6000		-3	100	-100	-100	1
90	325	40	-300	-80	-6000		-3	100	-100	-100	1
95	314	40	-300	-80	-6000		-3	-100	-100	-100	1
95	314	40	-300	-80	-6000		-3	100	-100	-100	1
95	314	40	-300	-60	-6000		-3	100	-100	-100	1
95	325	30	-300	-20	-3000		-3	150	-100	-100	1
95	325	40	-300	-100	BELOW		-3	100	-100	-100	1
95	325	40	-300	-60	0		-3	-100	150	-150	1
95	325	40	-300	-40	-6000		-3	-100	-100	-100	1
105	314	40	-300	-60	-6000		-3	100	-100	-100	1
95	314	30	-300	-60	-6000		-3				1
100	314	40	-300	-40	-3000		-3				1
105	314	30	-300	-40	-6000		-3				1
115	314	30	-300	-60	-6000		-3				1
115	314	30	-300	-60	-6000		-3				1
85		30	-300	0	0		-3	150	100	-100	1
85		30	-300	20	0		-3	100	150	-150	1
90		20	-300	0	0		-3	100	100	-100	1
90		20	-300	0	0		-3	100	150	-100	1
90		20	-300	20	0		-3	100	100	-150	1
90		20	-300	20	0		-3	150	150	-100	1

MISSION SEGMENT VARIATION, LEVEL FLIGHT 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S	ACC	CY-LNG	CY-LAT	COLL	OCCUR
40	325	20	-300	-20	-3000		-3	100	-100	-100	1
40	325	20	-300	0	-3000		-3	100	-100	-100	1
60	314	20	-300	0	-3000		-3	-100	-100	-100	1
60	314	20	-300	0	-3000		-3	150	-100	-100	1
60	325	30	-300	-20	-3000		-3	100	-100	-100	1
70	314	20	-300	-20	-3000		-3	150	-100	-100	1
70	314	20	-300	0	-3000		-3	150	-100	-100	1
70	325	30	-300	-80	BELOW		-3	-100	-100	-100	1
75	314	20	-300	0	-3000		-3	100	100	-100	1
75	314	20	-300	0	0		-3	100	-100	-100	1
75	325	30	-300	-80	-6000		-3	-100	-100	-100	1
80	314	20	-300	0	-3000		-3	-100	100	-100	1
80	314	30	-300	0	-3000		-3	150	-100	-100	1

TABLE LXXXVIII - Continued

MISSION SEGMENT VARIATION, LEVEL FLIGHT 9000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
80	325	40	-300	-60	-6000	-3	-100	100	-100	1
85	314	30	-300	-40	-6000	-3	150	-100	-100	1
90	314	30	-300	-40	-6000	-3	150	-100	-100	1
90	314	30	-300	-20	-3000	-3	-100	-100	-100	1
90	314	40	-300	-20	-3000	-3	100	-100	-100	1
105	314	40	-300	-60	BELOW	-3	-100	100	-100	1
105	314	40	-300	-40	-6000	-3	150	-100	-100	3
110	314	40	-300	-40	-6000	-3	150	-100	-100	1
115	314	40	-300	-60	BELOW	-3	-100	100	-100	1

MISSION SEGMENT VARIATION, DESCENT 6000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
80	314	20	-300	-20	-3000	-3	-250	-100	-100	1

MISSION SEGMENT VARIATION, DESCENT 7000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
40	325	10	-300	-20	0	-3	-100	-100	-100	1
70	325	10	-300	20	0	-3	-100	-100	200	1
80	314	20	-300	-20	0	-3	-200	-100	-100	1
90	314	30	-300	-60	-3000	-3	-100	-100	-100	1
90	325	20	-300	-20	0	-3	-100	100	-100	1
95	314	20	-300	-60	-6000	-3	-100	100	-100	1
95	314	20	-300	0	0	-3	100	-100	-100	1
95	325	20	-300	-20	-3000	-3	-100	-100	-100	1
100	314	30	-300	-40	-3000	-3	-100	-100	-100	1
100	314	30	-300	-40	0	-3	-100	-100	-100	1
105	325	20	-300	0	-3000	-3	100	100	-100	1
110	314	30	-300	-20	0	-3	-100	100.	-150	1
110	314	40	-300	-60	-6000	-3	100	-100	-100	1
100	314	30	-300	-60	-3000	-3				1
110	314	30	-300	-40	-3000	-3				1
110	314	30	-300	-20	0	-3				1
115	314	30	-300	-60	-6000	-3				1
115	314	30	-300	-80	-6000	-3				1

MISSION SEGMENT VARIATION, DESCENT 8000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
70	314	20	-300	0	0	-3	100	-100	-100	1
75	314	10	-300	0	0	-3	-100	-100	-100	1
75	314	10	-300	0	0	-3	100	-100	-100	1
75	314	20	-300	-20	-3000	-3	100	-100	-100	1
75	314	20	-300	0	-3000	-3	-100	-100	-100	1
75	314	20	-300	0	-3000	-3	100	-100	-100	1
75	314	20	-300	0	-3000	-3	150	-100	-100	1
75	325	10	-300	0	0	-3	100	-100	100	1
80	325	30	-300	-80	-3000	-3	-100	-100	-100	1
90	314	20	-300	0	0	-3	-100	-100	-100	1
95	314	30	-300	-80	-6000	-3	-100	-100	-100	1

TABLE LXXXVIII - Concluded

MISSION SEGMENT VARIATION, DESCENT 8000 LB (CONTINUED)

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
95	325	40	-300	-100	BELOW	-3	100	-100	-100	1
100	314	30	-300	-60	-6000	-3	-100	-100	-100	1
105	314	30	-300	-60	-6000	-3	100	-100	-100	1
110	314	30	-300	-60	-6000	-3				1
115	314	30	-300	-40	-3000	-3				1
90		20	-300	20	0	-3	100	100	-100	2
95		20	-300	0	0	-3	100	100	-100	1
105		20	-300	20	0	-3	100	100	-100	1

MISSION SEGMENT VARIATION, DESCENT 9000 LB

VEL	RPM	TORQ	R/C	OAT	ALT	A/S ACC	CY-LNG	CY-LAT	COLL	OCCUR
40	325	20	-300	-20	-3000	-3	-100	-100	-100	1
40	325	20	-300	0	-3000	-3	-100	-100	100	1
60	314	10	-300	0	0	-3	150	-100	-100	1
60	314	20	-300	0	-3000	-3	100	-100	-100	1
60	325	20	-300	-20	-3000	-3	100	-100	-100	1
75	314	20	-300	0	-3000	-3	150	-100	-100	3
80	314	20	-300	20	0	-3	100	100	-100	1
80	314	30	-300	-40	-6000	-3	150	-100	-100	1
80	314	30	-300	0	-3000	-3	150	-100	-100	1

TABLE LXXXIX. n_x PEAKS VERSUS VARIOUS PARAMETERS BY FLIGHT CONDITION AND MISSION SEGMENT

FLIGHT CONDITION	MISSION SEGMENT	NX	VEL	ALT	WGT	NY	NZ
STEADY STATE	HOVER	0.10	BLW	-3000	8000	-0.10	0.9
COLLECTIVE PULLUP	LEVEL FLIGHT	0.10	BLW	0	7000	-0.10	0.9
COLLECTIVE PULLUP	DESCENT	0.10	BLW	-3000	9000	-0.10	0.9
FLARE	DESCENT	0.10	BLW	-3000	9000	-0.10	0.9
LEFT TURN	HOVER	0.10	BLW	-3000	7000	-0.10	0.9

TABLE XC. n_y PEAKS VERSUS VARIOUS PARAMETERS BY FLIGHT CONDITION AND MISSION SEGMENT

FLIGHT CONDITION	MISSION SEGMENT	NY	A/S	ALT	WGT	NX	NZ
STEADY STATE	ASCENT	-0.10	40	-6000	8000	-0.10	0.9
STEADY STATE	ASCENT	-0.10	70	-3000	8000	-0.10	0.8
STEADY STATE	ASCENT	-0.10	70	0	7000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.10	75	BELOW	8000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.10	80	-6000	8000	-0.10	1.1
STEADY STATE	LEVEL FLIGHT	-0.10	85	BELOW	8000	-0.10	1.2
STEADY STATE	LEVEL FLIGHT	-0.10	85	0	7000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.15	90	-6000	8000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.10	90	-6000	8000	-0.10	1.1
STEADY STATE	LEVEL FLIGHT	-0.15	90	-6000	8000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.10	95	-3000	7000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	0.10	95	-3000	7000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	0.10	95	-3000	7000	-0.10	0.9
STEADY STATE	LEVEL FLIGHT	-0.10	95	0	7000	-0.10	0.9
STEADY STATE	DESCENT	0.10	80	-6000	8000	-0.10	0.9
STEADY STATE	DESCENT	-0.10	85	-6000	8000	-0.10	0.7
STEADY STATE	DESCENT	0.10	85	-3000	7000	-0.10	0.9
STEADY STATE	DESCENT	-0.10	85	-3000	8000	-0.10	1.2
STEADY STATE	DESCENT	-0.15	90	-6000	8000	-0.10	1.2
STEADY STATE	DESCENT	-0.10	90	-6000	8000	-0.10	0.9
STEADY STATE	DESCENT	-0.10	95	-6000	8000	-0.10	1.1
RIGHT TURN	LEVEL FLIGHT	-0.10	40	-6000	8000	-0.10	0.9
LATERAL REVERSAL	HOVER	0.10	BLW	-3000	8000	-0.10	0.8

TABLE XCI. GUST n_z PEAKS VERSUS VARIOUS PARAMETERS BY FLIGHT CONDITION AND MISSION SEGMENT

INITIATION OF ASCENT, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.6	.02	314	40	-3000	7000	0.10	0.04	-0.10	-0.10

RIGHT TURN, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10

RIGHT TURN, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.00	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.02	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	324	90	-3000	7000	0.15	0.04	-0.10	-0.10

RIGHT TURN, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.7	.01	314	80	0	7000	0.15	0.04	-0.10	-0.10
1.3	.01	314	80	0	7000	0.15	0.04	-0.10	-0.10
0.7	.01	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	85	-3000	7000	0.15	0.04	-0.10	-0.10

COLLECTIVE PUSHOVER, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.7	.01	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.00	314	95	-3000	6000	0.20	0.04	-0.10	-0.10

CYCLIC PULLUP, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	324	60	BELOW	9000	0.10	0.04	-0.10	-0.10

TABLE XCI - Continued

STEADY STATE, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	314	75	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.01	314	90	-6000	8000	0.15	0.04	-0.10	-0.10
0.7	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.8	.00	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.00	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	0	7000	0.15	0.04	-0.10	-0.10
0.7	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-6000	7000	0.20	0.04	-0.10	-0.10
1.3	.01	314	100	-6000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
1.3	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.00	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	0	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	0	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	110	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.03	314	115	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.02	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
0.4	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	324	60	0	8000	0.10	0.06	-0.10	-0.10
0.7	.03	324	60	0	8000	0.10	0.06	-0.10	-0.10
0.7	.01	324	70	0	8000	0.10	0.06	-0.10	-0.10
0.8	.01	324	70	0	8000	0.10	0.06	-0.10	-0.10
0.6	.01	324	75	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	75	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.02	324	75	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.02	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.01	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.02	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.00	334	95	0	8000	0.15	0.04	-0.10	-0.10

TABLE XCI - Continued

STEADY STATE, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.02	314	70	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.02	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
0.7	.01	314	85	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-6000	7000	0.15	0.04	-0.10	-0.10
1.3	.03	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
0.7	.01	314	90	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	90	-3000	6000	0.20	0.04	-0.10	-0.10
0.7	.01	314	90	-3000	6000	0.20	0.04	-0.10	-0.10
1.3	.01	314	90	-3000	6000	0.20	0.04	-0.10	-0.10
0.7	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.3	.01	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.00	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.03	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.00	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.02	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.00	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-3000	7000	0.20	0.04	-0.10	-0.10

TABLE XCI - Continued

STEADY STATE, LEVEL FLIGHT (CONTINUED)

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.02	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.02	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.01	314	110	-3000	8000	0.20	0.06	-0.10	-0.10
1.2	.00	314	110	0	6000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-6000	7000	0.25	0.04	-0.10	-0.10
1.3	.01	314	115	-6000	8000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	314	115	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.25	0.04	-0.10	-0.10
1.2	.01	314	115	-3000	7000	0.25	0.04	-0.10	-0.10
0.7	.01	314	120	-6000	7000	0.25	0.04	-0.10	-0.10
1.2	.01	314	120	-6000	7000	0.25	0.04	-0.10	-0.10
1.3	.02	314	125	-3000	7000	0.25	0.04	-0.10	-0.10
1.2	.02	314	125	0	6000	0.25	0.04	-0.10	-0.10
1.2	.01	324	75	-6000	8000	0.15	0.04	-0.10	-0.10
0.7	.01	324	80	0	7000	0.15	0.04	-0.10	-0.10
0.8	.01	324	85	BELOW	8000	0.15	0.04	-0.10	-0.10
1.2	.03	324	85	BELOW	8000	0.15	0.04	-0.10	-0.10
0.6	.01	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.3	.01	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.00	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.00	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
0.7	.00	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.00	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.3	.01	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.3	.02	324	95	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.01	324	95	-6000	8000	0.15	0.04	-0.10	-0.10
0.7	.01	324	95	-6000	8000	0.15	0.04	-0.10	-0.10
0.8	.00	324	95	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	95	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	324	95	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	324	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.02	324	95	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	324	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	324	100	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.00	324	105	-3000	7000	0.20	0.04	-0.10	-0.10

TABLE XCI - Concluded

STEADY STATE, LEVEL FLIGHT (CONTINUED)

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	324	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.02	324	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.00	324	110	-3000	7000	0.20	0.04	-0.10	-0.10
0.8	.00	324	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	110	-3000	7000	0.20	0.04	-0.10	-0.10

STEADY STATE, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.4	.02	314	40	-3000	7000	0.10	0.04	-0.10	-0.10
1.3	.02	314	40	-3000	7000	0.10	0.04	-0.10	-0.10
1.2	.02	314	60	-3000	7000	0.10	0.04	-0.10	-0.10
1.3	.02	314	70	-3000	7000	0.10	0.04	-0.10	-0.10
0.7	.01	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.02	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	75	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.01	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.03	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	85	-6000	8000	0.15	0.04	-0.10	-0.10
0.7	.01	324	85	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.02	324	85	-3000	8000	0.15	0.04	-0.10	-0.10
1.2	.01	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
1.3	.01	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.01	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.01	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	324	95	-6000	8000	0.15	0.04	-0.10	-0.10

TABLE XCII. MANEUVER n_z PEAKS VERSUS VARIOUS PARAMETERS BY FLIGHT CONDITION AND MISSION SEGMENT

TOUCHDOWN, HOVER

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.00	314	BLW	-3000	7000	0.05	0.04	-0.10	-0.10
1.2	.00	314	BLW	-3000	8000	BLW	0.06	-0.10	-0.10
1.3	.00	324	BLW	-3000	7000	BLW	0.04	-0.10	-0.10

TOUCHDOWN, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.04	314	BLW	-3000	7000	BLW	0.04	-0.10	-0.10

LEFT TURN, HOVER

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.7	.01	314	BLW	-6000	8000	0.05	0.06	-0.10	-0.10
1.2	.00	314	BLW	-6000	8000	0.05	0.06	-0.10	-0.10
0.8	.03	314	40	-6000	8000	0.05	0.06	-0.10	-0.10

LEFT TURN, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.1	.02	314	60	-3000	7000	0.10	0.04	-0.10	-0.10
1.1	.04	314	60	-3000	7000	0.10	0.04	-0.10	-0.10
1.2	.28	314	75	-3000	7000	0.15	0.04	-0.10	-0.10
1.1	.02	314	75	-3000	9000	0.15	0.06	-0.10	-0.10
1.1	.05	314	80	-6000	7000	0.15	0.04	-0.10	-0.10
0.8	.01	314	80	-6000	7000	0.15	0.04	-0.10	-0.10
0.8	.02	314	80	-6000	7000	0.15	0.04	-0.10	-0.10
1.1	.24	314	80	0	7000	0.15	0.04	-0.10	-0.10
0.8	.01	314	85	-6000	7000	0.15	0.04	-0.10	-0.10
1.1	.25	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.26	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.8	.02	314	90	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.33	324	75	BELOW	8000	0.15	0.04	-0.10	-0.10

LEFT TURN, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.1	.08	314	40	-6000	6000	0.10	0.04	-0.10	-0.10
1.1	.02	314	40	-6000	7000	0.05	0.04	-0.10	-0.10
1.1	.02	314	40	-6000	7000	0.05	0.04	-0.10	-0.10
1.1	.15	314	40	-6000	7000	0.10	0.04	-0.10	-0.10
1.1	.13	314	40	-6000	8000	0.05	0.06	-0.10	-0.10
1.2	.20	314	60	-6000	6000	0.10	0.04	-0.10	-0.10
1.1	.04	314	60	6000	7000	0.10	0.06	-0.10	-0.10
1.2	.11	314	75	0	8000	0.15	0.06	-0.10	-0.10
1.1	.05	314	80	0	8000	0.15	0.06	-0.10	-0.10
1.1	.04	314	85	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.01	314	85	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.01	314	95	-6000	7000	0.20	0.04	-0.10	-0.10

TABLE XCII - Continued

LEFT TURN, LEVEL FLIGHT (CONTINUED)

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.27	314	95	-6000	8000	0.20	0.04	-0.10	-0.10
0.8	.02	314	100	-6000	8000	0.20	0.04	-0.10	-0.10
1.1	.04	314	105	BELOW	8000	0.20	0.04	-0.10	-0.10
1.1	.07	314	105	BELOW	9000	0.20	0.04	-0.10	-0.10
1.1	.01	314	105	0	8000	0.20	0.06	-0.10	-0.10
1.1	.03	314	105	0	8000	0.20	0.06	-0.10	-0.10
1.2	.09	314	105	0	8000	0.20	0.06	-0.10	-0.10
1.1	.02	314	110	-6000	7000	0.20	0.04	-0.10	-0.10
1.1	.01	314	110	-6000	7000	0.20	0.04	-0.10	-0.10
1.1	.04	314	115	BELOW	9000	0.20	0.04	-0.10	-0.10
1.1	.07	314	115	BELOW	9000	0.20	0.06	-0.10	-0.10
1.1	.03	314	[illegible]	-6000	9000	0.20	0.06	-0.10	-0.10
1.1	.12	324	70	-3000	8000	0.10	0.06	-0.10	-0.10
1.1	.03	324	70	-3000	8000	0.15	0.06	-0.10	-0.10
1.2	.32	324	75	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.03	324	80	-3000	8000	0.15	0.06	-0.10	-0.10
1.2	.13	324	80	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.04	324	80	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.05	324	90	-3000	8000	0.15	0.06	-0.10	-0.10

LEFT TURN, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.8	.01	314	40	-3000	6000	0.10	0.04	-0.10	-0.10
1.2	.17	314	60	-3000	6000	0.10	0.04	-0.10	-0.10
0.8	.03	314	60	-3000	9000	0.10	0.06	-0.10	-0.10
1.1	.03	314	60	-3000	9000	0.10	0.06	-0.10	-0.10
1.1	.03	314	70	-3000	9000	0.15	0.06	-0.10	-0.10
1.1	.01	314	95	BELOW	8000	0.20	0.04	-0.10	-0.10
0.8	.01	314	100	BELOW	8000	0.20	0.04	-0.10	-0.10
1.1	.02	324	80	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.09	324	85	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.06	324	90	0	8000	0.15	0.06	-0.10	-0.10

RIGHT TURN, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.8	.02	314	60	0	7000	0.10	0.04	-0.10	-0.10
1.1	.07	314	75	-6000	7000	0.15	0.04	-0.10	-0.10
1.1	.02	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.02	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.03	314	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.03	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
0.6	.03	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.1	.09	324	40	-6000	8000	0.05	0.04	-0.10	-0.10
1.1	.01	324	60	0	7000	0.10	0.04	-0.10	-0.10
1.1	.08	324	75	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.10	324	80	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.10	324	80	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.03	324	90	-6000	8000	0.15	0.04	-0.10	-0.10

TABLE XCII- Continued

RIGHT TURN, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.1	.04	314	BLW	-3000	6000	0.05	0.04	-0.10	-0.10
1.2	.06	314	40	-6000	7000	0.10	0.04	-0.10	-0.10
1.2	.04	314	40	-3000	8000	0.10	0.04	-0.10	-0.10
1.1	.06	314	40	0	8000	0.10	0.06	-0.10	-0.10
1.2	.17	314	40	3000	7000	0.05	0.06	-0.10	-0.10
1.1	.04	314	60	-6000	7000	0.10	0.04	-0.10	-0.10
1.1	.04	314	60	-3000	6000	0.10	0.04	-0.10	-0.10
0.8	.01	314	60	-3000	6000	0.10	0.04	-0.10	-0.10
1.1	.01	314	60	-3000	6000	0.10	0.04	-0.10	-0.10
1.1	.01	314	60	-3000	9000	0.10	0.06	-0.10	-0.10
1.1	.08	314	60	0	7000	0.10	0.04	-0.10	-0.10
1.3	.29	314	60	3000	7000	0.10	0.06	-0.10	-0.10
1.1	.01	314	60	3000	7000	0.10	0.06	-0.10	-0.10
1.3	.19	314	70	-6000	7000	0.10	0.04	-0.10	-0.10
1.1	.01	314	70	-6000	7000	0.15	0.04	-0.10	-0.10
1.2	.10	314	70	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.05	314	70	-3000	9000	0.15	0.06	-0.10	-0.10
0.8	.01	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.01	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.05	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
0.8	.01	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.05	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.02	314	75	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.02	314	75	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.05	314	75	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.03	314	75	-3000	8000	0.15	0.06	-0.10	-0.10
1.1	.02	314	75	-3000	9000	0.15	0.06	-0.10	-0.10
1.2	.27	314	75	0	8000	0.15	0.06	-0.10	-0.10
1.1	.03	314	80	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.01	314	80	-3000	6000	0.15	0.04	-0.10	-0.10
1.2	.42	314	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.1	.03	314	80	-3000	9000	0.15	0.06	-0.10	-0.10
1.1	.09	314	80	-3000	9000	0.15	0.06	-0.10	-0.10
1.1	.10	314	80	0	8000	0.15	0.06	-0.10	-0.10
1.1	.03	314	85	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.08	314	90	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.02	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.01	314	90	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.02	314	95	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.05	314	95	-6000	8000	0.20	0.04	-0.10	-0.10
1.1	.00	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
0.8	.01	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
1.1	.02	314	95	-3000	6000	0.20	0.04	-0.10	-0.10
1.1	.03	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.06	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.1	.01	314	100	-3000	6000	0.20	0.04	-0.10	-0.10
1.3	.30	314	105	-6000	8000	0.20	0.04	-0.10	-0.10
1.1	.01	314	105	-3000	6000	0.20	0.04	-0.10	-0.10
0.7	.01	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.2	.02	314	110	-3000	7000	0.20	0.04	-0.10	-0.10
1.1	.04	314	115	BELOW	9000	0.20	0.04	-0.10	-0.10

TABLE XCII - Continued

RIGHT TURN, LEVEL FLIGHT (CONTINUED)

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.1	.05	324	40	-6000	8000	0.05	0.04	-0.10	-0.10
1.2	.08	324	40	-6000	8000	0.10	0.04	-0.10	-0.10
1.1	.03	324	40	-6000	8000	0.10	0.04	-0.10	-0.10
1.2	.14	324	40	-6000	8000	0.10	0.04	-0.10	-0.10
1.2	.03	324	60	-6000	8000	0.10	0.04	-0.10	-0.10
0.8	.04	324	80	-3000	6000	0.15	0.04	-0.10	-0.10
1.1	.02	324	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.1	.13	324	85	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.04	324	85	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.03	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.02	324	85	-3000	8000	0.15	0.04	-0.10	-0.10
1.1	.01	324	85	-3000	8000	0.15	0.04	-0.10	-0.10
1.1	.05	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
0.8	.02	324	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.1	.01	324	90	-3000	8000	0.15	0.04	-0.10	-0.10
0.8	.01	324	90	-3000	8000	0.15	0.04	-0.10	-0.10
1.1	.02	324	90	-3000	8000	0.15	0.04	-0.10	-0.10
0.8	.01	324	95	-3000	7000	0.15	0.04	-0.10	-0.10
1.2	.05	324	95	-3000	8000	0.15	0.04	-0.10	-0.10
1.2	.01	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
0.7	.02	324	105	-3000	7000	0.20	0.04	-0.10	-0.10
1.1	.02	324	105	0	8000	0.20	0.06	-0.10	-0.10
1.1	.04	324	105	0	8000	0.20	0.06	-0.10	-0.10

RIGHT TURN, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.04	314	BLW	-6000	7000	0.05	0.04	-0.10	-0.10
0.8	.01	314	40	-6000	7000	0.10	0.04	-0.10	-0.10
1.1	.06	314	40	-6000	7000	0.10	0.04	-0.10	-0.10
1.1	.01	314	60	-3000	6000	0.10	0.04	-0.10	-0.10
1.1	.11	314	60	-3000	8000	0.10	0.06	-0.10	-0.10
1.2	.41	314	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.1	.03	314	80	-3000	9000	0.15	0.06	-0.10	-0.10
1.1	.02	314	80	0	8000	0.15	0.06	-0.10	-0.10
1.2	.02	314	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.02	314	90	-3000	7000	0.15	0.04	-0.10	-0.10
1.3	.07	314	95	3000	7000	0.15	0.06	-0.10	-0.10
1.1	.03	314	95	3000	7000	0.20	0.06	-0.10	-0.10
0.8	.04	314	100	BELOW	9000	0.20	0.06	-0.10	-0.10
1.1	.01	314	115	-6000	8000	0.20	0.04	-0.10	-0.10
1.1	.01	324	85	-6000	8000	0.15	0.04	-0.10	-0.10
0.8	.02	324	90	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.06	324	90	3000	7000	0.15	0.06	-0.10	-0.10
1.1	.03	324	95	-6000	8000	0.15	0.04	-0.10	-0.10
1.1	.03	324	95	3000	7000	0.15	0.06	-0.10	-0.10

TABLE XCII - Continued

COLLECTIVE PUSHOVER, ASCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.01	324	40	0	8000	0.10	0.06	-0.10	-0.10
0.7	.02	324	85	-6000	8000	0.15	0.04	-0.10	-0.10

COLLECTIVE PUSHOVER, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.7	.03	314	40	-3000	6000	0.10	0.04	-0.10	-0.10
1.2	.01	314	80	-3000	6000	0.15	0.04	-0.10	-0.10
0.7	.01	314	95	-6000	7000	0.20	0.04	-0.10	-0.10
0.7	.01	324	BLW	-6000	8000	0.05	0.04	-0.10	-0.10
0.7	.02	324	80	-6000	8000	0.15	0.04	-0.10	-0.10
1.2	.00	324	85	-3000	7000	0.15	0.04	-0.10	-0.10
0.7	.01	324	85	-3000	7000	0.15	0.04	-0.10	-0.10

COLLECTIVE PUSHOVER, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.8	.01	314	110	BELOW	9000	0.20	0.06	-0.10	-0.10
1.2	.01	324	80	-3000	7000	0.15	0.04	-0.10	-0.10

CYCLIC PUSHOVER, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.11	314	40	-3000	7000	0.05	0.04	-0.10	-0.10
1.2	.05	314	90	0	8000	0.15	0.06	-0.10	-0.10

COLLECTIVE PULLUP, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.3	.02	314	60	-6000	7000	0.10	0.04	-0.10	-0.10
1.2	.01	324	80	-6000	8000	0.15	0.04	-0.10	-0.10

COLLECTIVE PULLUP, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.2	.02	314	105	-6000	7000	0.20	0.04	-0.10	-0.10
1.2	.01	324	60	BELOW	8000	0.10	0.04	-0.10	-0.10

CYCLIC PULLUP, LEVEL FLIGHT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.3	.02	314	75	-3000	7000	0.15	0.04	-0.10	-0.10
1.4	.14	314	80	-6000	7000	0.15	0.04	-0.10	-0.10
1.2	.01	314	80	-3000	7000	0.15	0.04	-0.10	-0.10
1.4	.15	314	95	-3000	7000	0.20	0.04	-0.10	-0.10
1.3	.03	314	95	-3000	7000	0.20	0.04	-0.10	-0.10

TABLE XCII - Concluded

CYCLIC PULLUP, DESCENT

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.3	.18	314	70	-3000	6000	0.15	0.04	-0.10	-0.10
1.3	.11	324	60	-6000	8000	0.10	0.04	-0.10	-0.10

STEADY STATE, AUTOROTATION

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
0.7	.12	304	70	0	7000	0.15	0.06	-0.10	-0.10

TRANSIENT, TRANSITION

NZ	NZ DURATION	RPM	VEL	ALT	WGT	MU	CT/S	NX	NY
1.3	.01	314	70	-3000	7000	0.10	0.04	-0.10	-0.10
1.2	.01	314	70	-3000	7000	0.15	0.04	-0.10	-0.10
0.6	.09	314	75	0	7000	0.15	0.04	-0.10	-0.10
0.7	.22	324	85	0	7000	0.15	0.06	-0.10	-0.10

TABLE XCIII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR ROTOR START

ROTOR START, GRD CONDITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	33.0	0.00	33.0	0.00	0.00
SUM	33.0	0.00	33.0	0.00	0.00

TABLE XCIV. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR ROTOR STOP

ROTOR STOP, GRD CONDITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	29.0	0.00	29.0	0.00	0.00
SUM	29.0	0.00	29.0	0.00	0.00

TABLE XCV. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR TAKEOFF BY MISSION SEGMENT

TAKEOFF, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	46.0	0.00	46.0	0.00	11.18
SUM	46.0	0.00	46.0	0.00	11.18

TAKEOFF, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	20.0	0.00	20.0	0.00	3.50
SUM	20.0	0.00	20.0	0.00	3.50

TABLE XCVI. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER nz PEAKS FOR TOUCHDOWN BY MISSION SEGMENT

TOUCHDOWN, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.00	1.0	.00	0.00
1.3	1.0	.00	1.0	.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	48.0	0.00	48.0	0.00	0.00
SUM	50.0	.00	50.0	.00	0.00

TOUCHDOWN, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	0.00
SUM	1.0	0.00	1.0	0.00	0.00

TABLE XCVI - Concluded

TOUCHDOWN, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	12.0	0.00	12.0	0.00	0.00
SUM	12.0	0.00	12.0	0.00	0.00

TABLE XCVII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR GROUND TAXI

GROUND TAXI. GRD CONDITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	2.0	.04	2.0	.04	.95
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	14.0	0.00	14.0	0.00	7.84
SUM	16.0	.04	16.0	.04	8.79

TABLE XCVIII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR MISSION SEGMENT VARIATION BY MISSION SEGMENT

MISSION SEGMENT VARIATION, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	N DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	40.0	0.00	40.0	0.00	0.00
SUM	40.0	0.00	40.0	0.00	0.00

MISSION SEGMENT VARIATION, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	106.0	0.00	106.0	0.00	0.00
SUM	106.0	0.00	106.0	0.00	0.00

TABLE XCVIII - Concluded

MISSION SEGMENT VARIATION, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	50.0	0.00	50.0	0.00	0.00
SUM	50.0	0.00	50.0	0.00	0.00

TABLE XCIX. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR BEGIN IN FLIGHT

BEGIN IN FLIGHT, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	0.00
SUM	1.0	0.00	1.0	0.00	0.00

TABLE C. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR END IN FLIGHT BY MISSION SEGMENT

END IN FLIGHT, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	4.0	0.00	4.0	0.00	0.00
SUM	4.0	0.00	4.0	0.00	0.00

END IN FLIGHT, GRD CONDITIONS

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	0.00
SUM	1.0	0.00	1.0	0.00	0.00

TABLE CI. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR INITIATION OF ASCENT BY MISSION SEGMENT

INITIATION OF ASCENT, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	37.0	0.00	37.0	0.00	6.21
SUM	37.0	0.00	37.0	0.00	6.21

INITIATION OF ASCENT, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	17.0	0.00	17.0	0.00	3.19
SUM	17.0	0.00	17.0	0.00	3.19

TABLE CII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR LEFT TURN BY MISSION SEGMENT

LEFT TURN, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	1.0	.01	0.00
0.8	0.0	0.00	1.0	.03	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.00	1.0	.00	.71
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	6.0	0.00	6.0	0.00	1.95
SUM	7.0	.00	7.0	.05	2.66

LEFT TURN, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	1.0	.02	4.0	.07	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	5.0	.58	6.0	.62	2.52
1.2	3.0	.87	3.0	.87	1.43
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	11.0	0.00	11.0	0.00	5.40
SUM	20.0	1.47	20.0	1.56	9.36

TABLE CII - Concluded

LEFT TURN, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	1.0	.02	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	15.0	.72	24.0	1.14	9.80
1.2	6.0	1.12	6.0	1.12	4.47
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	50.0	0.00	49.0	0.00	19.40
SUM	71.0	1.84	71.0	2.29	33.67

LEFT TURN, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	3.0	.05	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	4.0	.13	6.0	.24	2.30
1.2	1.0	.17	1.0	.17	.65
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	14.0	0.00	14.0	0.00	7.46
SUM	19.0	.30	19.0	.46	10.41

TABLE CIII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR RIGHT TURN BY MISSION SEGMENT

RIGHT TURN, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	6.0	0.00	6.0	0.00	2.24
SUM	6.0	0.00	6.0	0.00	2.24

RIGHT TURN, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	1.0	.03	0.00
0.7	0.0	0.00	1.0	.03	0.00
0.8	0.0	0.00	1.0	.02	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	5.0	.35	7.0	.48	2.99
1.2	2.0	.05	2.0	.05	1.05
1.3	1.0	.03	1.0	.03	.78
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	22.0	0.00	22.0	0.00	8.50
SUM	30.0	.43	30.0	.63	13.31

TABLE CIII - Concluded

RIGHT TURN, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	2.0	.04	0.00
0.8	0.0	0.00	8.0	.12	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	25.0	1.06	45.0	1.54	13.13
1.2	11.0	1.33	16.0	1.58	6.57
1.3	3.0	.78	3.0	.78	.90
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	72.0	0.00	71.0	0.00	34.22
SUM	111.0	3.18	111.0	4.06	54.81

RIGHT TURN, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	1.0	.02	1.0	.02	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	3.0	.07	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	8.0	.30	11.0	.41	4.51
1.2	3.0	.47	3.0	.47	1.59
1.3	1.0	.07	1.0	.07	.44
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	16.0	0.00	16.0	0.00	7.75
SUM	29.0	.86	29.0	1.03	14.30

TABLE CIV. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR COLLECTIVE PUSHOVER BY MISSION SEGMENT

COLLECTIVE PUSHOVER, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.09
SUM	1.0	0.00	1.0	0.00	.09

COLLECTIVE PUSHOVER, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	1.0	.02	1.0	.02	.07
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	1.0	.01	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	30.0	0.00	29.0	0.00	5.84
SUM	31.0	.02	31.0	.02	5.91

TABLE CIV - Concluded

COLLECTIVE PUSHOVER, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	5.0	.08	5.0	.08	.48
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	2.0	.02	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	79.0	0.00	78.0	0.00	11.80
SUM	84.0	.08	84.0	.10	12.28

COLLECTIVE PUSHOVER, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	.07
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.01	1.0	.01	0.26
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	22.0	0.00	21.0	0.00	5.11
SUM	23.0	.01	23.0	.02	5.44

TABLE CV. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR CYCLIC PUSHOVER BY MISSION SEGMENT

CYCLIC PUSHOVER, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.16
SUM	1.0	0.00	1.0	0.00	.16

CYCLIC PUSHOVER, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0-00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	6.0	0.00	6.0	0.00	1.05
SUM	6.0	0.00	6.0	0-00	1.05

TABLE CV - Concluded

CYCLIC PUSHOVER, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	2.0	.16	2.0	.16	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	3.0	0.00	3.0	0.00	1.09
SUM	5.0	.16	5.0	.16	1.09

TABLE CVI. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR COLLECTIVE PULL-UP BY MISSION SEGMENT

COLLECTIVE PULLUP, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.09
SUM	1.0	0.00	1.0	0.00	.09

COLLECTIVE PULLUP, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	7.0	0.00	7.0	0.00	.62
SUM	7.0	0.00	7.0	0.00	.62

TABLE CVI - Concluded

COLLECTIVE PULLUP, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.01	1.0	.01	.11
1.3	1.0	.02	1.0	.02	.17
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	32.0	0.00	32.0	0.00	5.60
SUM	34.0	.03	34.0	.03	5.88

COLLECTIVE PULLUP, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	2.0	.02	2.0	.02	.25
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	36.0	0.00	36.0	0.00	5.22
SUM	38.0	.02	38.0	.02	5.47

TABLE CVII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER nz PEAKS FOR CYCLIC PULL-UP BY MISSION SEGMENT

CYCLIC PULLUP, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	8.0	0.00	8.0	0.00	1.55
SUM	8.0	0.00	8.0	0.00	1.55

CYCLIC PULLUP, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.09
SUM	1.0	0.00	1.0	0.00	.09

TABLE CVII - Concluded

CYCLIC PULLUP, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	1.0	.01	0.00
1.3	1.0	.03	2.0	.05	.28
1.4	2.0	.29	2.0	.29	.40
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	12.0	0.00	12.0	0.00	2.59
SUM	15.0	.32	15.0	.35	3.26

CYCLIC PULLUP. DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	2.0	.29	2.0	.29	.51
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	11.0	0.00	11.0	0.00	3.59
SUM	13.0	.29	13.0	.29	4.10

TABLE CVIII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR FLARE BY MISSION SEGMENT

FLARE, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	2.0	0.00	2.0	0.00	.40
SUM	2.0	0.00	2.0	0.00	.40

FLARE, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	51.0	0.00	51.0	0.00	15.19
SUM	51.0	0.00	51.0	0.00	15.19

TABLE CIX. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR STEADY STATE BY MISSION SEGMENT

STEADY STATE, GRD CONDITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	154.0	0.00	154.0	0.00	212.63
SUM	154.0	0.00	154.0	0.00	212.63

STEADY STATE, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	96.0	0.00	96.0	0.00	40.21
SUM	96.0	0.00	96.0	0.00	40.21

TABLE CIX - Continued

STEADY STATE, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	1.0	.01	1.0	.01	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	184.0	0.00	184.0	0.00	230.14
SUM	185.0	.01	185.0	.01	230.14

STEADY STATE, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.02	1.0	.02	19.31
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	443.0	0.00	443.0	0.00	1210.12
SUM	444.0	.02	444.0	.02	1229.43

TABLE CIX - Concluded

STEADY STATE, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	207.0	0.00	207.0	0.00	151.64
SUM	207.0	0.00	207.0	0.00	151.64

STEADY STATE, AUTOROTATION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	1.0	.12	1.0	.12	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.66
SUM	2.0	.12	2.0	.12	.66

TABLE CX. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_Z PEAKS FOR RIGHT SIDEWARD FLIGHT

RIGHTSIDE FLT., HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	2.0	0.00	2.0	0.00	1.13
SUM	2.0	0.00	2.0	0.00	1.13

TABLE CXI. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR LONGITUDINAL REVERSAL BY MISSION SEGMENT

LONGITUDINAL REVERSAL, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	4.0	0.00	4.0	0.00	.58
SUM	4.0	0.00	4.0	0.00	.58

LONGITUDINAL REVERSAL, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.14
SUM	1.0	0.00	1.0	0.00	.14

TABLE CXI - Concluded

LONGITUDINAL REVERSAL, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	4.0	0.00	4.0	0.00	.55
SUM	4.0	0.00	4.0	0.00	.55

TABLE CXII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_z PEAKS FOR LATERAL REVERSAL BY MISSION SEGMENT

LATERAL REVERSAL, HOVER

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	2.0	0.00	2.0	0.00	.24
SUM	2.0	0.00	2.0	0.00	.24

LATERAL REVERSAL, ASCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	2.0	0.00	2.0	0.00	.17
SUM	2.0	0.00	2.0	0.00	.17

TABLE CXII - Concluded

LATERAL REVERSAL, LEVEL FLIGHT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	3.0	0.00	3.0	0.00	.38
SUM	3.0	0.00	3.0	0.00	.38

COLLECTIVE PUSHOVER, DESCENT

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	1.0	.01	1.0	.01	.07
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	22.0	0.00	21.0	0.00	5.37
SUM	23.0	.01	23.0	.02	5.44

TABLE CXIII. OCCURRENCES AND DURATIONS FOR MAXIMUM AND TOTAL MANEUVER n_Z PEAKS FOR TRANSIENT BY MISSION SEGMENT

TRANSIENT, GRD CONDITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	0.0	0.00	0.0	0.00	0.00
0.7	0.0	0.00	0.0	0.00	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	0.0	0.00	0.00
1.3	0.0	0.00	0.0	0.00	0.00
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	201.0	0.00	201.0	0.00	60.74
SUM	201.0	0.00	201.0	0.00	60.74

TRANSIENT, TRANSITION

RANGE	MAX. OCCUR.	NZ DURATION	TOTAL OCCUR.	NZ DURATION	TOTAL TIME
BELOW	0.0	0.00	0.0	0.00	0.00
0.4	0.0	0.00	0.0	0.00	0.00
0.5	0.0	0.00	0.0	0.00	0.00
0.6	1.0	.09	1.0	.09	0.00
0.7	1.0	.22	1.0	.22	0.00
0.8	0.0	0.00	0.0	0.00	0.00
0.9	0.0	0.00	0.0	0.00	0.00
1.1	0.0	0.00	0.0	0.00	0.00
1.2	0.0	0.00	1.0	.01	0.00
1.3	1.0	.01	1.0	.01	.24
1.4	0.0	0.00	0.0	0.00	0.00
1.5	0.0	0.00	0.0	0.00	0.00
1.6	0.0	0.00	0.0	0.00	0.00
1.7	0.0	0.00	0.0	0.00	0.00
1.8	0.0	0.00	0.0	0.00	0.00
2.0	0.0	0.00	0.0	0.00	0.00
2.2	0.0	0.00	0.0	0.00	0.00
NONE	1.0	0.00	1.0	0.00	.95
SUM	4.0	.32	4.0	.33	1.19

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